# TERTIUM QUID:

#### CHAPTERS ON VARIOUS DISPUTED QUESTIONS.

BY

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IN TWO VOLUMES.

VOL. I.

### LONDON:

KEGAN PAUL, TRENCH, & CO., 1 PATERNOSTER SQUARE. 1887.



## PREFACE.

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My title needs a word of apology. I had purposed to call the book simply Contemporary Essays; but I was warned that such a name would probably choke off even the small sale which was the most that I could hope for. So an alternative had to be devised; and the subjects treated being too various for any brief comprehensive description, the uniting idea had to be found, if at all, in the method of treatment. Now it happens that most of the papers deal with matters of contem-

porary controversy, as to which two antagonistic opinions have been strongly entertained and enforced, each with distinct and direct reference to the other. Thus, the Positivist view of life has had to reckon almost exclusively with the view of more or less orthodox Christianity; the aim of 'Natural Religion' has been simply to refute and supplant Supernaturalism; those who doubt whether life is 'worth living' have directed all their weapons against the fallacious confidence of the Materialistic school: Vivisectionist and Antivivisectionist have thrust and parried each as if his only possible critic or accuser were the other; 'evidence in matters extraordinary,' devoured or rejected en bloc, has been used as the gauge alike of popular credulity and of scientific arrogance. Or to turn to æsthetic subjects, the most conspicuous artistic creator of our time has been either worshipped as a prophet or decried as a charlatan; in Music, the issues between classical form and free romanticism, and between the absolute and the expressive, have been contested with none the less earnestness and conviction for being totally unreal; and the same may be said of a good deal of the chronic disputes as to the relative greatness of poets, and the relative value of form and content, sound and sense, in Poetry. In most of these questions I am conscious of 'a great deal to be said on both sides,' and also of a strong aversion to saving it in the ways which have chiefly attracted the public ear. In most of them the truer view seems to me to depend on taking a standpoint, or in recognising facts and principles, other than those which partisans have usually recognised or taken. And this truer view, if such it be, is not one that would extenuate differences, or induce lions to lie down with lambs, or generally tend towards compromise in the ordinary sense; its immediate tendency, on the contrary, is rather to make each of the duels triangular., In short, it is a tertium quid; and my hope is that as such it may commend itself to some who, from the very fact of having felt at once or by turns sympathetic and alien to each of the pronounced sides in these controversies, have comparatively seldom cared or dared to make their voice heard in them. As I privately know some such persons, I infer the existence of many more; and the very last thing that I would lay claim to is a position of isolated originality. If my fantastic title and my solemn explanation of it seem to suggest so absurd a claim, I will withdraw the explanation, leave the title to stand not as the 'name of the book,' but as 'what the name of the book is called,' and throw the blame of it on the people who will not look at a collection of plain unvarnished 'Essays.'

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#### THE HUMAN IDEAL.

No fact is more patent, no boast more common, than that we live in an age of sympathy, of candour, of tolerance—an age when the desire to persecute our opponents has been replaced by at least an assumed desire to comprehend them, and a disposition to welcome agreements rather than to exaggerate differences. And on general and impersonal grounds the boast is reasonable enough; on the view, at any rate, that Truth, and especially the truth about the deeper concerns of life, is a complex result to be approached by many methods. or gradually hammered out of many brains, each of which may advantageously seek to put itself at the point of view of the others. Many would, of course, dispute this advantage, on the ground that the truth which is really essential is not to be hammered out in this promiscuous way, but on the contrary has been flashed on us once for all, and is merely hidden by the dust of the hammering.

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But the former view is the one that daily gains acceptance; and according to it the *general* advantage of tolerance for Truth's sake is indisputable.

From the point of view of individual experience, however, the advantages are by no means so unmixed. Not, of course, but that they exist, and in a positive as well as a negative form. Not only does every one, whatever his view of the deeper bearings of this wide tolerance, count it a blessing to be thankful for that he runs no risk of bodily suffering, or even of social ostracism, for his opinions; but from the positive side, from the point of view of actual intellectual enjoyment, the prevailing controversial atmosphere has its bright and bracing qualities. There is a very real pleasure in the constant supply of able discussion on interesting topics, of polemics free from coarseness and marked by mutual respect, which are a peculiarity of these latter days. To those especially whose minds are cramped or but little exercised by their ordinary pursuits, there is a sense of healthy appetite in passing from Mr. Matthew Arnold to Mr. Frederic Harrison, or from Professor Huxley to Mr. Martineau, with the keen relish of a new course. I am not for a moment suggesting that pleasure is the chief thing to be derived from

these writers. They write primarily for our edification and instruction: and that very manysidedness of Truth to which I have referred should make us grateful that our instructors, if so diverse. are at any rate so able. But for all that, the perplexities and contradictions which are thus brought before us, and which, if they are there, we have no resource but to face manfully and with the best guidance we can get, must for the time seem not joyous but grievous, not an advantage but a disadvantage. It is not in the existence and recognition of these courteously argued problems that we reap, as individuals, the benefit of our searching and sympathetic age. The only side on which the conflict can yield us positive satisfaction is the side of recreation; just as a man's mind, in following a powerful and well-expressed demonstration of pessimism, might receive from it the normal glow of healthy intellectual exercise.

Let us grant, then, to the glow of intelligent and friendly controversy its fullest value. Let us grant that there are seasons of elation and expansion when we feel that the Universe just now is really very interesting, and that we have all round us eager and active minds who will leave us in no lack of intellectual pabulum. But such bits of

recreation, once a month or oftener, are after all but a feeble set-off against the searchings, at other seasons, of a pain which was far less prominent in the days of simpler formulæ, of cruder differences, and of more pronounced strifes. I mean the sense of alienation in sentiment and intuition, of forcible rifting asunder in the deepest places of emotion, of those between whom countless other instincts and sentiments form a most vital bond. This peculiarity seems inseparable from the overlapping and interlacing circles of modern thought. As long as one man can feel that his aloofness from another extends through pretty well the whole of his outlook on life, or that a particular region of ideas is of such unique import as to make differences there an impassable barrier, the pain of the feeling will seldom be of a very deep or personal sort. The coarser or more robust natures may even find a certain infusion of pleasure in the sense of definite hostility, and of power to hold their own. Tenderer spirits may mourn over what seems to them the blindness and perversity of their fellows; but with them the sense of the benefits of their faith is usually so predominant, that their grief lies rather in the thought of what others are losing or foregoing than in the special kind of internal conflict

which I have here in view. For this the condition is that the distinct lines of difference shall have become crossed by all manner of other lines of speculative agreement and of spiritual sympathy, and that those manifold relations shall have been set up which are both a cause and a result of a liberal respect for individual opinion. The mind then can no longer retain its simple and comparatively comfortable attitude of defiance, or dislike, or indifference, or even of predominant ardour for others' conversion. In proportion as his outlook widens, the individual ceases to feel himself confronted with an external array of false or alien views, in the very aversion to which he may find a bond of attachment to his own Church or party. The closer-knit solidarity of thought and feeling translates the gaps and breaks and jars from the outward to the inward arena. In opposing his fellow, a man feels the wrench of all the living ties which have come to make his fellow a part of himself. And while the wider opening of the mind to sympathy means also its wider exposure to such wrenches, the healing circle of complete sympathy is narrowed by the very multiplication of its conditions. In a word, the fuller existence which every man enjoys in the close fellowship of

his fellow-men reveals that constant characteristic of every advance of organic life—an increased susceptibility to *pain*.

I do not think there can be anything weakly sentimental in the full recognition of this fact. A man may take up his lot unrepiningly, and recognise that though his work in the world is made more difficult by the conditions of thought among which it is cast, though life seems full of triviality or full of perplexity according as he elects to ignore or to probe its deeper mysteries, this does not prevent the work itself from being quite sufficiently definite, and having to be done. In the very fact, moreover, of the multiplicity of his sympathies with many who, if marked off by the cruder formularies of past days, would be his foes, he may feel such an assurance of progress as half compensates for the obscurity of the goal. But all this is quite compatible with a keen sense of the irony of this modern existence—an irony which, if it has its light and amusing side, goes too deep to be generally amusing. The conditions of amusement have, indeed, receded in proportion as those of irony have multiplied. Scepticism has come to be as cheap as orthodoxy, and of the old weapons the lighter sort are especially antiquated and rusty. Destructive criticism has lost its youth and buoyancy: we are tired of having venerable fallacies cleverly exposed; for the inquirers of to-day, the zest of eighteenth-century attack is as much gone by as the zest of fourteenth-century faith—the spirit of renaissance as the spirit of dogma. And at the very time when the minds which exercise themselves at all on the problems of life are strenuously set on positive conceptions, or at any rate are determining that the darker places and the deeper issues shall be no longer ignored, and even fiction has given us an 'Adam Bede' for a 'Candide'—at this very time, I say, when the struggle after Truth has become uncompromisingly grave and searching, has it become the rule that speculative differences are not to exercise any influence on ordinary human relations. The idea of evolution, to take an instance, has done more indirectly to sap the foundations of dogma than all the direct assaults put together. But while, on the one hand, it is preached with a fervency of tone in which there certainly lurks no echo of Voltaire, on the other hand it is never allowed to ruffle the harmony of a social evening; and any divine who refused to the doctrine a social position side by side with his own would be thought wanting in

tact and savoir faire. The divine himself, again, must account it a fact of deep importance that his assailants, the prophets of the kingdom of Man, are divided among themselves; so that, even in respect of an historical problem, one of them bids us venerate for 'their beauty, their passionate selfdevotion, their strength in obedience, fellowship, discipline,' the centuries which another scouts as belonging to 'the disease and delirium of the Catholic episode'; but he will not be gratified by witnessing any breach in their mutual esteem. It is from this joint growth, then, of earnestness and tolerance that our present curious condition results. The age which has, in truth, seen the very depths stirred, the difficulties multiplied in all sorts of ways. and the differences, like the sympathies, revealing their real scope and complexity, has also in the same proportion seen the surface of intellectual life made smooth, the sects socially homogeneous, and the machinery of controversy easy.

And in this contrast the irony lies. There are times when the mind awakes to a consciousness of the rents underlying the widespread sympathies and conventions of its daily environment, with a shock recalling (save for its far greater power and reality) the start of momentary fancy that one's own

senses are perhaps not the same as one's neightbours'—that I call blue what you call red, or up what you call down. The contact is so close, vet the separation often so complete; the aggregate life of outward concordance so little corresponds to the whirlings and clashings of the individual atoms. Nay (though this is an instance of the irony at its lightest), the well-bred aspect of our leading Reviews, the fair blue covers of Fraser 1 and the Nineteenth Century as they lie on our tables—so unlike Middle-Age folios, so inviting to take up, so easy to read, so convenient to talk about, binding into the unity of an hour's pleasant study divergencies of view profound enough in other times to have brought bodies as well as books to the flames—are a fitting symbol of the way the fair outer crust of urbane controversy, of manifold agreement and harmonious social intercourse, seems often nowadays to mock the straining reality of the forces beneath, the parting and conflicting currents of personal experience, and the alienating gulfs that nothing but a completer sympathy could fill. An absolute difference in respect of their most cherished ideals and intuitions is surely a far more

<sup>&</sup>lt;sup>1</sup> The excellent Magazine in which this paper was originally published is unfortunately defunct.

bewildering and incongruous fact as now presented -e.g. between two friendly acquaintances at a dinner-party, parallel in their business, in their enjoyments, in all the visible aspects of life, and in their view of the vast majority of its practical problems—than in former days between men who would not have broken bread in each other's houses and whose mutual sympathies might have found their fullest outlet in the use of physical methods for each other's conversion. What wonder if the sense of this incongruity goes far to choke social expansion, even in what up to a certain point or down to a certain depth should be most congenial society? For that sense of established fellowship, of fundamental agreement, felt, however little publicly expressed, which quickens as nothing else can the pulses of social intercourse, is as little realised now in any casual assembly of educated persons as if they were truly a society of Gallios; or as if their mutual qualifications stopped short at Aristotle's. conditions of ideal friendship, best exemplified, according to him, in a tête-à-tête of 'two men of easy pleasantry.'

This incongruity between the core and the surface of life is naturally less prominent in the minds of professed adherents of one or other of the pre-

vailing forms of constructive belief; partly because they have their own anchor and refuge, and partly also because the authors they read and the company they keep consist usually to a preponderating extent of their co-believers. But no thinking person in these days can live so happily isolated in a favourite region of ideas as not to have some experience of the distress I have described: the modes and directions in which it is felt varying as widely as the mental and moral temperaments of those who feel it. And inasmuch as it is just where agreement is extensive that difference becomes keenly felt, and the distress is thus a function at once of agreements and differences, the extent of the one is usually a very fair measure of the pain and irritation of the other. Now the title of this paper suggests the point in current speculation where to many of us the feeling is at its maximum; and this, as I have argued, rather owing to than in spite of the extent of our sympathy with Positivist criticism and doctrine. It happens, however, that the religion of Humanity has been almost always attacked from the standpoint of some set of views which (as is alleged) it would tend to supplant, and with special reference to certain definite moral and asthetic losses which its acceptance would bring

about. It is on the things which would be taken away that the stress has been laid; on the threatened disappearance of the vital substance of morality, as well as of the picturesque lights and shades of life, with the withdrawal of supernatural religion. Not only have I no intention of adding to the controversy, recently worn rather threadbare, as to the relation between morality and supernatural beliefs, but it is the precise fact that that topic can be altogether omitted, and the human position altogether granted, in the remarks here to be made, which gives them any interest they may possess. For the attacks on the Human Ideal from outside have really tended to conceal its vulnerability from inside; the argument from what it excludes has swamped the argument from what it includes. The points which can be truly urged against the conception from a basis of wide agreement with it, are constantly confused and overladen by arguments belonging to one or other of the creeds, or the sets of hopes and fears, against which the whole force of humanistic logic and eloquence directs itself.

Yet the importance of separating the two sorts of attack, and of giving weight even to an Agnostic's quarrel with the new religion, may be

admitted by Christian and Humanist alike. The former may surely own some advantage in an argument based on premisses which the adversary does, instead of those which he does not, accept. The very insignificance, in the orthodox believer's eyes, of any purely mundane attack on a mundane system becomes itself significant, if it seems that a breach can be made with such tenth-rate weapons. And on the Positivist himself-and under this more convenient term I may be allowed for present purposes to include all those who find matter for fervent exultation in the earthly fates of their race—these mundane questions seem almost to have a priority of claim, if only because of their very definite and manageable limits. To explain further: the Positivist ideal is not a mere condition of intellect and character, of ideas and conduct; it is a condition of life regarded with certain feelings, which feelings are as essential a part of it as its intellectual and moral characteristics. If, then, those who share the ideas (up to the point, at any rate, where ideas become indistinguishable from feelings), and who regard the Positivist's highest ideal of social and self-renouncing conduct as not only the true ideal but as an ideal which will in all probability be actually approached

-if such persons, I say, differ utterly from the Positivist in the feelings with which they find themselves able to regard the result, it seems clear that the whole ground of contention is altered and simplified. For, in the first place, it is made evident at what point the difference becomes one of taste and temperament, unamenable to either logic or eloquence. And, in the second place, a perfectly new issue of fact starts into prominence: and what it becomes imperative for the Positivist to prove is seen to be, not the practical or logical failure of other religions, nor the possibility that men may be brought on human grounds to conform to the highest standard of duty, but that his own particular taste and temperament are likely to be the prevailing ones of the future. For while the fact that A or B has such and such instincts and tastes cannot be affected by argument, the question of the evidence on which A or B may expect others in time to develop similar instincts and tastes is a thoroughly debateable one.

This statement of the case will become more intelligible as soon as it is translated into particular terms. And as a text is convenient in such matters, I may refer for an authoritative picture of the Positivist ideal, by one who cherishes

it, to the striking papers, entitled 'Creeds Old and New,' which Mr. Frederic Harrison contributed in the autumn of 1880 to the Nineteenth Century. I may first, however, touch on a doubt which is specially suggested by part of Mr. Harrison's discussion, and which must often occur to those who have no positive system to adhere to, still less to present or expound,-whether, namely, they are justified in speaking at all. It is not merely the question whether views which tend to darken the brighter hopes of others have any right to expression, unless they can make good their beneficial tendency in some other direction. The doubt I refer to is rather concerned with the whole position of negative criticism in relation to progress and the evolution of ideas.

Evolution is a subject which Mr. Harrison speaks of more than once; but at one time as if it were something almost wholly outside the instincts and activities of the immediate present; at another as if these were its most essential constituents.<sup>1</sup> Or rather he has not explicitly brought

<sup>&#</sup>x27;He says, for instance, that 'it would be a shallow thought to suppose that the very act of evolution is the end towards which it is bearing us'; where evolution is used as equivalent to the present revolutionary throas which are the precursors of a new birth. But elsewhere he treats evolution as embracing the (whole complex

out where his particular view of progress differs from evolution as ordinarily understood. He is profoundly impressed with the present chaotic condition of ideas and aims; he eloquently deplores the loss of order, harmony, devotion, selfabasement; and the means by which he conceives that an advance will be made out of this disorganised and revolutionary epoch is by seeking help from the past, by gathering up many lost strands of habit and sentiment, by a synthesis of elements which have hitherto flourished apart at different places and in different ages. But all this, though it may very properly be called evolution, is obviously not paralleled by anything in the linear evolution of organic life. Mr. Harrison may be quite right in complaining that men nowadays do not regard the whole sweep of human progress but only the next little bit of the curve; yet the very metaphor might have suggested that according to the common idea of evolution, as a simple line of successive events, this would be all

process of human progress, future as well as past. And in this sense he surely cannot distinguish it from some other end outside itself. The process is itself the end, and the only end which, on his own view, can have any meaning; being simply the fullest and worthiest realisation of human life as it passes, not a heaven put at the close of it.

that would be open to them. But though the metaphor is thus inadequate, and the use of the term in regard to human progress might have been more clearly distinguished, the view itself seems full of truth; for ideas and habits do not die after the fashion of ancestors, but may always start into new and fertilising life, and show themselves capable of fresh combinations.

Still it must be evident that even in this exceptional and complex sort of evolution, in which many elements of the past, fallen out of sight for a time, may begin again gradually to mingle, the present, and the people actually alive in it, with all their specialities of nature and circumstance, must after all be the preponderating factor. They are what have come to be, and they are most immediately the parents of what is going to be. However complex be the eddies and refluent currents which bewilder the present course of thought, it is still through the brains and hearts of the existing generation that the great stream of human evolution has to flow. However true it is that 'conservatives and reformers alike chafe at the discord of ideas which is ever hindering Truth,' their chafing does not prevent the state of discord, with their voices as part of it, from having been produced

in its place as a link in the inevitable sequence. Even Mr. Harrison, who assigns to evolution, as its fullest meaning, the complete history of man, who is confident that through the interlude of present struggle lies our ordained path to the confines of a new construction, and who is capable of so abstracting himself as to regard the whole process from beginning to end as one vast necessary curve, still shows at times his close and individual membership in this limited inch of the curve by joining in this chafing, which is one of its most prominent characteristics. But from his wider philosophic standpoint, gazing at the self-developed sequence of part on part, each part consisting of the units who live, think, and feel in it, he must see that his opponents hold a parallel position with himself in having been conditioned by the past and contributing to condition the future; that the individual performers in this temporarily discordant human symphony are not responsible if they find their instruments not tuned to a common pitch, nor bound to throw them away in consequence; and that each of them as a unit may suggest to him as a unit that after all it takes two to make a discord.

And in several passages Mr. Harrison seems

fully to admit this fact. He not only makes it one of the distinctive traits of the Human Synthesis that it treats the present as a mere continuation of the past, and the future as the destined product of both, and scorns the idealists who talk 'as if the present were a muddle hardly worthy of attention,' but he expressly says that the desired unity can never come about 'by each going his own way without regard for his neighbour's actions or his neighbour's opinions,' and that the synthesis will have to be prepared 'by deliberate and conscious agreement.' In a word, if the reorganisation of life and thought is to be a natural and healthy growth, that must necessarily include the unfettered play of criticism, and the honest record even of damping experiences. The evolution of ideas has again and again proved itself too intricate an affair for a monopoly of its processes by positive and confident thinkers to be sound, or even possible; and even those who hold that not to have optimist convictions on the chief concerns of man is a sign of disease may comfort themselves with the reflection that the great symptom of truly diseased thought is its sterility.

But though negative and somewhat cheerless views may claim a hearing on the general and impersonal ground that they belong to a swarming

process, too vast to be judged from any single standpoint, the views themselves which I would in this case urge are the very reverse of general and impersonal. My precise complaint against the Positivist picture is that it is so general—that it is a picture of a huge pageant, a bird's-eye view of Humanity, such as a dweller here, proud of his planet, might show off to a sympathetic visitant from Mars: and that when Mr. Harrison deals with the view which an actual human tramper in the pageant might take of himself and his fellows, he always imagines him as able and willing at any moment to take such leaps into the air as will enable him too to obtain a bird's-eye survey of the whole pageant, and not as more likely to be occupied with the fact that he himself is extremely hungry and footsore, and that the backs of his neighbours on each side are breaking.

Most people, I suppose, in watching the general outward aspect of some well-organised community, where all that meets the eye is the inspiring sight of mutual dependence and corporate life, must have been struck at certain instants with a sort of shock by the sudden realisation that, in another aspect, each member is really for ever alone with his one self-inclosed life, with joys and griefs

that are wholly incommunicable and unshareable. Even in presence of such an accepted type of a happy society as a school of healthy boys in recreation-time, how startlingly will the sense recur of what childhood's pangs really were, how gnawing, how hopeless, how carefully concealed—with a wonder as to which, be it only one or two, of the figures so similar to an outsider's eye may be wearing that cheerful outer seeming as a mask. Some such revulsion of feeling, but with a far more general application, one may experience, I think, when, after admiring with Mr. Harrison the manifold operations of this living machine of humanity, its wonderful productions, its incomparable vigour, its ever-increasing complexity, one recollects that each individual wheel has a sentient life of its own. and is perpetually racked and whirled in directions which seem utterly irrelevant to the general tendency of the machine; or, to change the metaphor, when, after letting one's eyes roam around the vast array of peaks which represent the permanent achievements of Humanity, and noting range beyond range up and along which the myriad tracks of human progress can be traced, one takes the sudden step from the capital H to the capital I, and faces the fact that the daily life of the

swarming multitudes of 'I's is cast in the vales and crannies, a million for every peak, which lie shut off from the broad prospect and from the exhilarating air, cramped, and dark, and often fever-stricken, for all that a fine view may be had for the climbing.

Metaphors, however, are the most unconvincing of arguments. Let me explain, then, that the darker and more unshareable side of individual experience is altogether omitted from Mr. Harrison's picture. While he describes it as the business of his creed to explain whatever belongs to man, and from man's point of view to supply a key to man's whole life, complete being, entire history-while he expressly says, 'Leave any side of thought or life wholly out of sight in your philosophy or your religion, and they introduce conflict, and ultimately confusion'—the words pain and grief are not once to be found in his exposition. In his philosophy and religion the side of life which those words represent is left wholly out of sight; it is as nonexistent, for aught the visitant from Mars would discover from Mr. Harrison's 'complete' theory, in the Europe of to-day as in Paradise before the Fall. Philosophies and religions which, while affecting to deal with the highest, know nothing of many of the commonest and widest truths that concern man.

are, in his own words, mere impostures. Is it, then, not a common and wide truth that suffering exists—that it has even been a question whether it be not the predominant condition—at any rate, that many do suffer terribly and hideously and in utterly unpreventable ways, while to many more life is a long and weary burden? One is ashamed of writing down such platitudes; but it is Mr. Harrison, not I, who is responsible for them. If a physiologist lays down that the food we swallow is the sole basis of bodily existence, and forgets to include the air we breathe, is his doctrine to be left to stand because the correction is a platitude? Yet such is exactly the position of one who analyses life into duty and pleasure, and forgets pain.

'But,' Mr. Harrison may say, 'granting my view not to be exhaustive, how does that affect its truth and value as far as it goes? I do not profess to explain the Universe: I expressly disavow interest in the unknowable origin of things. I find pain and evil: I am not responsible for them, and I do not know, or even think I know, who is. They are inevitable conditions, of the complete removal of which I indulge no Utopian hopes. How, then, can they imply a flaw in an Ideal thus carefully and soberly guarded?' It is to this last question that

I am about to attempt an answer; again premising that the flaw is not i the Ideal itself, as seen by Mr. Harrison's eyes, but in the assumption that persons of other constitution could ever regard it with those feelings which he himself has specially emphasised as essential to religion; as to which persons, therefore, he is bound to show cause why they are likely to die off instead of (as will here be argued) largely to increase in the future.

For the Positivist religion of the future is nothing if not stirring to the imagination; it is nothing if not satisfying to the emotions; it is nothing if not peace-giving. Mr. Harrison himself has admirably expressed that happy mingling of contentment with ardour which he conceives as belonging to the very essence of Religion. 'To have religion in any true sense,' he says, ' is to have peace.' His conceptions involve a particular method of regarding life quite as much as a particular method of behaving in it. With whatever unceasing devotion a man may spend himself for his fellows. he will still, unless he can find at least tolerable ease under the weight of human fates, be an outcast from Mr. Harrison's religion. I am assuming, be it observed, that such devotion is possible; that Mr. Harrison's highest standard of conduct, and of

the unselfish feelings which prompt the conduct. might be reached on purely human grounds and by the natural evolution of the human conscience. Though recognising much force in the arguments on the other side, and also deeming that it is immeasurably harder to exemplify the thoroughly altruistic ideal for a week than to lead a forlorn hope (in the literal sense that far fewer men in the world are at this moment capable of doing it). I still cannot but see that the harder task is actually accomplished by individuals with no extra-mundane motive; and, looking to the past growth of the social sentiment, I can see nothing unreasonable in expecting that the race as a whole might very gradually approach the standard now reached by individuals. Even on the view that human life would be indefinitely darkened by the decay of extra-mundane beliefs, it might still be urged that the native nobleness of men often seems only to require stress of circumstance to bring it out; that the devotion rises with the need, and the springs of heroism gush from a source where despair cannot reach to freeze them. But at any rate I am assuming here Mr. Harrison's point of view in this respect. I plant myself on his Pisgah; but though I can perceive the land beyond to be a decided

improvement on the wilderness, there is still too much gall and wormwood mingling with the milk and honey for me to regard it with gladness, let alone rapture.

'But surely,' Mr. Harrison may say, 'the milk and honey largely predominate. An enormous amount of the suffering which comes from jarring passions will, ex hypothesi, come to an end when the social sentiment has truly prevailed. What remains may easily be borne.' This might be true in the purely hypothetical sense—that if the milk and honey and the gall and wormwood could all be mixed up together in a common vat, and a certain amount of the compound doled out to each person for his daily consumption, the sweet taste might go far to swamp the bitter. But the fallacy would be involved which seems to underlie every discussion as to whether good or evil prevails, or will prevail, in the world—the assumption, namely, that happiness and unhappiness, or pleasure and pain, in different individuals, must needs be commensurable things. The untenability of this assumption is shown instantly by imagining a case. Every one of any moral sense would forego an hour's, or a day's, or a year's extreme happiness to save some one else an hour's, or a day's, or a year's

considerable misery; and he would expect any other person in his position to do the same. If, then, such persons presented themselves one after the other, there is no point at which any of them could say, 'Stop! There are now so many of us whose happiness is at stake that the amount really overweighs the single person's misery. Let us, therefore, all be happy, and him miserable.' For each of them would feel in the case of each of the others the necessary decisiveness of the instinct which was decisive with himself; and the justice of the matter is perfectly plain. For the single person would have in view for others only the same fate as for himself in claiming that they, for the sake of saving him from misery, should accept the temperate zone which stops short of very marked happiness; while they, in enjoying while he was preventably suffering, would be permitting an utterly unjustifiable difference. Nor need we embarrass our supposition with the element of deliberate selfishness. We need not suppose any relation between the parties themselves—between the many who would enjoy and the one who would suffer; but, putting ourselves as arbiters outside both enjoyment and suffering, if the one were to be the price of the other, we feel we should

elect to prevent both instead of to permit both. Nor is there anything in *duration* to affect the principle: supposed equal lengths, whether five minutes or eternity, we should refuse to call into existence the fuller happiness even of many, at the expense of having also to call into existence the positive misery of one. Precisely the same principle is involved, it may be observed, in the familiar fact that we feel strong positive relief when unconsciousness puts a temporary stop to the sentience of a suffering person, and not a shade of positive regret when unconsciousness similarly puts a stop to the sentience of a thousand enjoying persons.

This reasoning is not in the least invalidated by the fact that many a person is willing to suffer, or actually suffers, for the sake of others; for, in the first place, suffering for the sake of others almost without exception means suffering to save or relieve others' suffering, not suffering to raise others above the temperate zone which they might otherwise occupy. And in the second place, if any one did exemplify the exceptional case, and, finding others cheerful, suffered torture to make them ecstatic, he would do so because he preferred it,

<sup>&</sup>lt;sup>1</sup> Such a sacrifice, though it might be admirable, would not, I imagine, have any moral validity. Nor do I think that it

and his voluntary choice would wholly alter the conditions. The same person would be the first to agree that, if it rested with him, as arbiter, to decide whether misery was to be produced in one, as the price of ecstasy in another or others, the decision could admit of no doubt.

The true view here is apt to be obscured by imagining both terms of the comparison as included within the experiences of a single individual. People feel that they are willing for themselves to entertain the bargain of so much pain for so much pleasure. It is easy to reply that the disagreeables so chosen would never be very acute—never too acute to be modified beyond reckoning by the concurrent knowledge of the pleasurable result; or that, the choice being their own, there could be no sense of soreness or wrong,

would be even possible for very long. Many, of course, may feel that it would, and, if it depended on the choice of the present moment, might commit themselves to it, even if told there were no subsequent escape; but given the power to revoke at any moment, I believe that each in time would necessarily and rightly make the sign which should cause such conditions to cease. The contention would be a perfectly simple one of egoistic and altruistic impulses. But there would be no cumulative force on the altruistic side; the happiness of the others would mean no more to the sufferer at the end of five or five hundred years; whereas the instinct to escape suffering, when this exceeds a certain pitch of intensity, seems inevitably to increase.

and so on. But there is no need of such arguments. This mode of comparison becomes entirely unavailable when the divergencies from the middle zone belong to different individuals. In such cases it is truly impossible to bring pleasure and pain to a common measure, or weigh them in a single balance, so as in any way to set the happiness of the many (even if they be many) against the unhappiness of the few (even if they be few). And it is well worth noting that those whose circumstances bring them most into contact with suffering are those who feel this truth and all that it involves most strongly.

But there is another reason why the mere fact that in a tolerably remote future the proportion of happiness to unhappiness is likely to change largely for the better (though a fact doubtless to be rejoiced over and as far as possible accelerated), is yet powerless to rouse any enthusiastic sense of the absolute value of human life. The future is no more real than the present and the past. Even the capital H loses its glamour if 'the glorious destiny of Humanity' is merely to mean the superior good-fortune of some distant generations, which will be no more living bits of Humanity then than we are now. And

indeed no one can be more emphatic than Mr. Harrison in asserting that the course of humanity is to be looked at as a whole. His human synthesis 'treats no part of the past as a blank'; it is 'a combining theory, applicable to the past as much as to the future.' Now the future of Humanity on this planet, he allows, will ultimately close: before that time it will have contained a certain number of individual lives precisely on a par, unit for unit, with those which have existed or do exist. And if we imagine posterity taking a comprehensive backward view over the whole of Humanity, what a very false note in the full harmony of their exultation would be the thought. 'How lucky for us to come at the end of the chain when the worst part is over! Others have suffered, but that doesn't matter to us. To many of our ancestors their life was bitter, but fortunately they had to live it, and consequently here are we with our life, which is sweet—Suave mari,' &c. Surely a profound undercurrent of mournfulness would attend those wide historical studies which by that time are to have become so universal; and historical studies, however complete, can never of course suggest a millionth part of the individual bits of suffering in the world. At any rate, it is

asking too much of us to ask us to forget our own troubles in rapturous prospective sympathy with those whose only attitude towards them is to be gladness at having escaped them.

In fact, however, this last argument is hardly needed. There can be no such gap between present and future conditions. Enough suffering will always remain to make the question of the desirability, on purely mundane grounds, of their sojourn on earth a question which numbers will answer, or will feel that others must answer, in the negative. To take only two of the sharper ills of life: physical suffering, though we may hope it will considerably diminish in extent, will always claim its tens of thousands of victims; bereavement admits of no possible amelioration by diminution either of its extent or of its bitterness.

The former of these evils, physical suffering, is often treated with especial shallowness. To dwell on its existence, to speak of it as an important item of life, is regarded as useless and morbid, if not as a sort of personal cowardice. There is really far more cowardice in seeking to banish the knowledge of it at times when we are not ourselves enduring it; and all the more so that its reality, however large a fact in the Universe, is to an alto-

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gether unparalleled degree dependent on the individual's actual present contact with it for being brought home to his mind. Even the most confident view of the desirability of mundane existence may be considerably modified in the course of a night's neuralgia. And if no fact of psychology is more certain or more remarkable than the power of physical pain, when not actually being suffered, to slip away from the imagination and the memory, and if this is a piece of good fortune for the nonsuffering person, it should surely be in the same proportion a most powerful incentive (and as much so on philosophical as on benevolent grounds) towards exercising the imagination on behalf of others. When we forget pain, or underestimate it, or talk about people 'getting used to it,' we are really so far losing sight of what the Universe. which we wish to conceive adequately, really is.

The subject of bereavement hardly requires a word: so palpable is the fact that every individual must live in much closer relation to some few of his fellows than to the rest of the world, and that in these lives a large part of himself, of his duties and opportunities no less than of his joys, is vitally wrapt up; so palpable is the satire of telling him to forget the stunting and maining of his own life

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in the feeling of belonging to a Humanity of individuals all subject to similar blows.

But if existence is bound to be to this extent bad, it may be said, the moral surely is not uselessly to contemplate it, but to concentrate all our efforts on making it as good as we can. Unquestionably; but then it is just the contemplation of it, the mode of regarding our life and our race and ourselves, that makes so vital a part of Mr. Harrison's ideal. We suppose ourselves to have shaken off, with him, the trammels of incomprehensible dogma and of effeminate culture-worship, and to have launched ourselves into a world of united and devoted activity. We have assumed, with him, that such a world will be better than the present. The difference is that in the midst of what is to him a pleasing stream of harmony we catch an alien and persistent note of discord. The only question between us and him is whether a life which will still be so very far from a scene of peace and comfort to many of the individuals who share it can be regarded with the contented rapture which alone would constitute service to it religious in his sense. And if many of us feel that we could never join in his mood without being utterly false to the facts around us, and which would still be

around us in his ideal state, he must tell us why he thinks that the population of the future will consist of people like him rather than of people like us.

'Well,' he may say, 'I think so because your mood is one of mawkish and ineffective sentimentalism; and mawkishness and sentimentalism have a natural tendency to die out in fresh and stirring air.' This answer would doubtless commend itself to those who shut their eyes to obvious facts, on an instinct that to call in question the value of existence in any way has a tendency to unfit them for making it better. But it has no cogency, unless an incompatibility can really be shown between mawkishness like ours and those parts of the Ideal, outside our own private feelings, which we have agreed to accept as likely to be increasingly realised; namely, social sentiment and entire devotion to human service. Now not only, I think, is the evidence from individuals the other way, but a most important fact, not as yet mentioned, goes far to support the view that a deeper sense of irremediable suffering will itself be a very notable element in that increasing social sentiment.

The fact I mean is simply the soothing and healing power of fellow-suffering. Circumstances come to every individual in which all that another can do for him is to grieve with him; and whatever

the hidden process may be, such helpless fellowmourning is found to act often as an extraordinary balm, when the conventional cheering platitudes about 'all for the best' and 'pain a blessing in disguise' would seem but an exasperating mockery. If one of the most inexplicable, this is certainly one of the most undeniable of the phenomena of sympathy. And if any one at any moment may be stricken into the state where such balm would be for him a matter of as urgent and desperate demand as a loaf for a starving man, the attitude of mind which keeps the possibilities in view is surely not only the insurance against the 'pride of life' and the UBpis of self-centred exultation, not merely the debt of recollectedness offered up by the individual at the shrine of a possible Nemesis; but is also the helpful attitude, the spiritual condition which most corresponds to others' need. Nor would I confine that need only to the exceptional experiences when it finds most urgent utterance: for one who is cheered by a cheque from an insurance office, thousands are cheered by the permanent sense that their goods are insured. And if the chance of these extreme moments for ourselves is not a thing to be con-

stantly brooded over, the very best means to prevent brooding is the latent feeling that the only possible support is at hand; that deep if not prominent in the hearts of those around us lies the sense of what life actually is to many, and might become to any, of those who live it. Nor does the cheerfulness which is as desirable a condition for work as for play, and for others' sake as for one's own, in any way exclude a pervading sense of the realities, into close and awful contact with which we or those nearest us may at any moment be summoned. Extension of this sense from a narrower to a wider circle naturally means great diminution of its intensity; it may thus be mitigated from an occasional torturing dread to a sober and watchful consciousness; but that it will in this way be extended is a probability which cannot be shut out from any theory of the growth of altruistic sentiment, least of all from one whose watchword is regard for the whole of human life. If suffering is indeed to those who are enduring it the most real of all realities, to refuse to dwell under the shadow of that fact, merely because it is a shadow, would ill accord with the idea of the increasing and closely-knit unity of the social organism. And at any rate by those who find health in the concentration of the mind on 'whatever belongs to man' the question must be faced whether to live so far in the shade must not be a vital condition of health; and whether, on their own theory, a sensibility whose very essence is sympathy can, for all its mawkishness, be expected to die of inanition in an increasingly sympathetic community.

Here, then, we reach the point whence the individualistic attitude, that tendency to picture and dwell on individual experiences which is as ineradicable (where it exists) as any other primary mental characteristic, reveals itself as a source of far wider and more practical altruistic inspiration than Mr. Harrison's bird's-eye views of the human pageant. If a day or a week of extreme pain and trial concentrates into itself more actual life, more waking reality, more of what makes one cry 'This is what it means to be a sentient creature,' than a month or a year of neutral or pleasurable existence in which no urgent demand rises to the lips -if it is in relation to the hours of hungry craving, of realised impotence, of mocking torture, not to the normal months of humdrum contentment, that a 'peace-giving religion' must be tested-if many of us can no more find satisfaction in a religion which is powerless to aid the individual on these

individual occasions than in a dentist who confines himself to explaining to us the use and development of teeth—there is at any rate comfort in the thought that those individual things in life the realisation of which makes the panacea of the big H seem a superficial mockery, will be truly minimised for each in proportion as they are truly realised by all.

I have not touched on the question how far, even in the absence of the positive evils which life in the future will inevitably comprise, that life could stir the feelings which are necessary to the new religion; how far, even if an anodyne were discovered for the deeper woes of body and mind, the spectacle of Humanity would be a peculiarly transporting one. Elimination of the sufferings of life would at any rate mean elimination of its heroisms; so that between the two the Ideal gets into rather a confusing state of oscillation. But there is one massive element which would remain independently of the acuter forms of suffering, and which, while equally with them conspicuous by its absence from Mr. Harrison's picture, is almost equally fatal to it -the element of hewilderment. The Positivist religion is 'to explain man to himself.' The Positivist, then, is able to imagine that the time

will come when a man will never, in sudden flashes, see himself, and his brief hold on life, and his relations to existence outside him, as an inscrutable riddle; a time when 'the abysmal deeps of personality' will be wholly filled up; a time when men will be insensible to the irony of affections and devotions spreading and deepening up to the blighting and clipping point; of 'Humanity overflowing the individual as the ocean does a cup,' till the cup happens one day to turn upside down; of the voice of conscience speaking in tones whose depth and urgency seem often a mockery of their contents; of the Goddess in whose path 'flowers laugh' and 'fragrance treads' crushing worshippers beneath her chariot-wheels; of the sense of infinite import in life, to be found (we are told) by each in the mere multitude of lives stunted and limited like his own. And, again, we may ask Mr. Harrison to tell us why individuals of the future will not be oppressed with these things, and oppressed in such measure as to make his religious ardour of acquiescence quite impossible to them. in face of the fact that individuals of the present, whose views both of facts and duties entirely concur with his own, are so oppressed. He cannot represent such feelings as inimical to human relations.

So far from there being anything anti-social in them, their natural and direct tendency is to drive the individual into silencing, as far as may be, the importunate questions where his own voice echoes in a lonely void, by opening wide every possible inlet and outlet of sympathy. On what symptom, then, would Mr. Harrison rest his prognosis?

This, then, is the burden of my inquiry. As regards the mere existence of the taste and temperament which are so opposed to his own, Mr. Harrison must, of course, admit it—and admit it, moreover, in persons who recognise as fully as himself that they are sons of Man and bound to the service of Man. That there are many of these who, looking into the future he draws, feel that Man still means men, that the future cannot annul the past, and that the future itself, as tested from the standpoint of suffering individuals and those who sympathise with them, is too perplexed and discordant an affair for exultation or even for peace—this also he must admit. He may regret it; but de gustibus non est disputandum. He may feel that we ought to be less sensitive to the shadows which do not seriously darken him; but ought would only mean that he thinks it would be for the general advantage if we had been con-

stituted on his model. One thing alone will avail him—to prove, namely, that his model is the one which has a tendency to survival, and that our particular constitution and tastes are doomed. Till he can do this, we may certainly bring against his Ideal the charge he truly brings against certain objects of reverence connected with older creeds—that it is 'the outcome of one very special type of spiritual nature.' The onus probandi lies with him; for the light of ordinary reason would certainly suggest that the recognition by each individual of ineradicable pain and perplexity in life, so far from being a mere morbid nursing of his own troubles, is the very first condition of such alertness of comprehension and sympathy as may make him most serviceable to others; so that the exact progress whereby the world would be brought into that condition of social feeling and action which is one part of Mr. Harrison's vision would be fatal to the imaginative joy and contentment necessary to constitute the condition in his sense a religion.

Throughout this discussion, the experiences described and the objections raised have been such as are compatible with accepting the whole of Mr. Harrison's destructive criticism, and the

various negations shared by him with the majority of students of physical science; whose various tastes and temperaments may lead them to conclusions like mine, or to conclusions like his, or to some 'human ideal' of their own, open to precisely similar objections in proportion as they get jubilant over it, and demand that others should do the same. Before concluding, however, I should be glad for a moment to transcend this negative basis, in order to point out what seems to me another fallacy in Mr. Harrison's argument; again centering round the word 'religion,' and again to be met by the question on what grounds certain feelings, extremely common now though not shared by Mr. Harrison, are likely to cease in the future.

He gets an easy advantage over the Theists, and especially over the Neo- (or, as he wittily calls them, the Nephelo-) theists, by pointing out that their creed of human duty is 'a perfectly human creed, built up out of observations of human nature,' 'avowedly derived from rational and earthly logic,' and that, as the great business of Religion is to show men their duty, and inspire them with a desire to do it, shadowy intuitions of an external Power or of an extra-mundane existence are irrevelant to it. 'A grand Perhaps is not

God: to dogmatise about the Infinite, to guess, to doubt, to fear, to hope there is a future life—that is not to have a religion whereby to live and die'; it is a mere 'bottom of à priori speculation,' to which the truly rational and religious scheme of duty has to be 'fitted on,' a mere hypothesis with which that scheme is 'interwoven.' That is to say, religion is so defined that certain feelings lie outside it, and thence it is tacitly inferred they have no value or raison d'être. I see no good in haggling about a word. If we had to choose between the two things, to be inspired with a desire to do one's duty would be infinitely more important than an intuition of 'a grand Perhaps.' Let, Mr. Harrison, if he will, reserve the term religious to the former—though by so doing he implicitly denies that the excluded intuitions have anything to do with inspiring others to do their duty, in the face of their own direct testimony to the contrary. But why are feelings to be scouted because a scheme of duty cannot be logically deduced from them? Can propositions be 'fitted on' to radiance and fragrance? Is a man's work 'interwoven' with light and air? To say that the intuitions of an external Providence and a future life have no value because they do not involve the facts and instincts of social duty, is like saying that a prisoner's hope of early release has no brightening influence on him because he can pick as much oakum without it. I am, of course, not denying that attempts have been made to establish logical contact between these experiences and the creed of duty which rests on a wide and reasoned view of human action; but for that very reason is it important to observe how little the joint existence of the two depends on such attempts. Mr. Harrison has here treated his opponents in a lump, and forced on them a view whose crudity some of them have themselves exposed; with an unintentional unfairness such as makes him elsewhere sum up metaphysicians as a class who 'languidly complain of utilitarian aims, sordid indifference to abstract thought, to the fine beauty of a meditative existence'; and represent men whose ideal of humanity is no less glowing than his own as people who 'scorn the noblest emotions' and 'think all will be well if the world can only be converted to a thirst for science.'

And then comes the final question, Why is it probable that the feelings and intuitions will vanish? Mr. Harrison fails to prove them valueless; how is he going to prove them moribund? He may

call that 'nebulous' in which others find a strong support; but what we want to know is, why are the nebulous persons to cease? For the nebulosity is clearly not the least of a kind which explanations and arguments can touch. Mr. Harrison is too candid to deny the existence of the feelings and intuitions in those who perfectly realise the facts and conditions of the material universe; whose scientific vision is as clear, and their agnosticism really as complete, as his own; to whom the 'supernatural' (in the sense of interference with uniform law) is as much a figment of the past as it can possibly be to the most enlightened minds ten thousand years hence. The fog, if it be one, is absolutely different in kind from all the fogs which Science has gradually dispelled. It depends not on logic or discovery, but on temperament, how far any one's outlook on this mundane existence will be coloured by the reflection that, if he lacks assurance that this is not all, he equally lacks assurance that it is. I am purposely still keeping clear of all arguments drawn from moral and religious grounds. I simply state, as a psychological fact, that the sense of possibilities that can never be disproved is capable of exercising a pervading effect on the human mind which is

absolutely irrelevant to any numerical estimate of odds; and that human spirits, oppressed in the manners described in this paper, find the sense of these possibilities an ineradicable fact in their lives. On paper, in a scheme of philosophy, the 'grand Perhaps' may look as feeble as 'Humanity' looks imposing. But there is another arena, In the hearts of countless individuals the former expands into a pervading influence, where the latter shrinks into a mere noun of multitude. To tell them that 'nebular hypotheses' are 'the religion of scholars, and not of men and women with work to do,' has no force unless it can be proved that the work remains undone; that the hypotheses interfere with the human creed and the ideal of selfrenouncing duty; that they have some anti-social tendency which contains the germ of their own decay. No such proof has been given. As the spread of science supplies no direct, so the spread of social morality supplies no indirect, argument for the probable cessation of an attitude of mind which is equally compatible with both. Account for it if you will; call it a result of the environment-of the pressure of human fates on the individual spirit. But even on that ground, to

assert that, the environment and the individual remaining essentially unchanged, an extremely common effect of one on the other will cease, is mere prophecy—and 'among all forms of mistake, prophecy is the most gratuitous.'

## 'NATURAL RELIGION''

IT would be useless and impertinent to occupy space with any detailed account of a work which every possible reader of this Essay must have read; and almost equally so to lavish praise on the spirit of peace and progress in which it is conceived, and on the well-known style, at once so weighty and so brilliant, in which it is executed. Its author's object is briefly this: putting 'supernaturalism' and dogma on one side, to show that the 'natural' Universe of facts and feelings supplies, in actual existence and operation, diverse elements of religion, which only need to be generally recognised for what they are, and to be consciously united, to make up a Religion—something fully worthy of that name, though in relation to the individual it might also be called Culture, and in relation to the world Civilisation. In dispersion, these diverse

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<sup>&</sup>lt;sup>1</sup> Natural Religion. By the Author of Ecce Homo. London: Macmillan. 1882.

elements are comparatively weak; they are misunderstood, often held to be opposed to religion, and even mischievously discordant among themselves; one set of men neglects one of them, and another another. Like the sticks of a faggot, they will find their true strength in union; and the possibility of their union is that they do, as a matter of fact, appeal to a common instinct and excite a common feeling—that of devoted selfforgetting admiration. This feeling, which is no other than worship, is specifically religious; and when it has found its true and complete Object, it will be a single Religion, embodied in a single universal Church—'a great commanding union of hearts and minds,' the invigorating influence of which will be felt in every department of life.

There can, of course, be no doubt as to what the elements must be. The same threefold division of the higher life has commended itself even to those who differ completely in their point of view with regard to it. With Plotinus, the three constituents are roads for attaining that elevation of mind in which the Infinite may be apprehended, and which 'I myself,' he says, 'have realised but three times as yet, and Porphyry hitherto not once.' They are: that 'devotion to the One,' to the

ordered unity of things, which is the mark of the natural philosopher; the love and moral purity of devout and ardent souls; and 'the love of beauty which exalts the poet.' With Goethe, they are the elements of Culture; which he sums up as 'Life in the Whole, in the Good, in the Beautiful.' With our author, as we have seen, they are the sufficient elements of Religion; not, as in the idea of Plotinus, mere paths to an unknown god, but actual present possession and worship; and he discriminates them as concerned with the eternal laws of the Universe, with Humanity, and with Beauty, or more briefly as Science, Morality, and Art.

The argument by which this view is supported is naturally aggressive as well as constructive; and on the aggressive side it seems unanswerable. Parts of the same lesson have been taught in different though not less impressive ways by Mr. Matthew Arnold, Mr. Ruskin, and the Positivist writers; but it is here re-enforced with all the weight of the author's individuality. We can have nothing but admiring assent for his exposure of the pettiness and vulgarity of what he calls the lower life; and of the incapacity of the existing dogmatic religions to meet the needs of the higher life by supplying a synthesis which may embrace

all its elements in one 'great atmosphere of thought and feeling.' Nor can we differ as to the importance, for human welfare, of Science, Morality, and Art—of a wider knowledge of Natural Laws, a wider love of Humanity, and a wider appreciation of Beauty. Our doubts begin when we turn to the positive additions which the present view of Natural Religion has made to the previous enlightened conceptions on these subjects.

And to glance first at the elements separately: the book gives the impression that its author has been habitually in very much closer contact with Morality, especially as studied in relation to history and politics, than with Science and Art. His picture of the scientific man, perpetually wrapt in contemplation of Law and Unity, is a very common ideal with those who appreciate the vastness of the leading scientific conceptions, and whose imaginations are impressed by the miraculous command of space and time which modern discovery has brought, but who have never been lost in the wilderness of laborious detail through which almost every investigation has to pass. The sunlit peaks are often better seen from a distance than from the myriad rough and tortuous paths by which they are actually scaled. And in a vast amount of

scientific work which is concerned with facts, there is much that is positively alien to the contemplation of laws; for the relation of facts to laws is perpetually not only obscure, but of a kind which could not possibly come within the purview of Science. Things simply are thus and thus in behaviour or topography; the manner of their having become so has been, of course, in every stage a natural process, as is the gradual accumulation of particular grains of sand in one particular heap; but to our eyes the greater part of natural process must be a myriad-fold accident, which might have given quite different results without any apparent violation of law. Even so large and interesting a law as that of Natural Selection everywhere presupposes individual variations which, for us, are strictly accidental. And as the course of differentiation is followed, and the attention narrowed down from the dominating laws of a multitude of species, which are constant under a multitude of conditions. to the uniformities prevailing among smaller and smaller groups, the facts which, for aught we can see, need not have been as they are occupy more and more of the ground, and seem often as remote from deduction, and from any vitalising conception of law, as the streets and squares of a city which a

cabman has to master. Even in the simpler region of inorganic matter, each of the most familiar chemical compounds has qualities which cannot be accounted for, which could not have been prophesied, and which can only be registered; and this would remain equally the case if the wildest dreams of the mechanical theory were realised.

But even apart from this, and supposing the peaks to be always more or less in view, can their effect upon us be reckoned on as an unchanging quantity? The conceptions which really open up new fields in the physical universe, such as the Atomic Theory, the Correlation of Forces, Evolution-conceptions which have a very different effect on the imagination from the gradual filling up of these territories with subordinate laws and facts—are necessarily few and far between; and in their merely scientific aspect the mind adapts itself to them with really terrible ease; so that even the last and greatest of them will probably be not much more exciting to our grandchildren than Gravitation. And the very search for larger and larger and more and more uniting conceptions, which has an exciting character of its own, is in some degree opposed to the excitement of novelty: to find anything in the future as exciting as the Correlation of Forces, we should have

to find some force which could not be correlatedwhich in the interests of unity would scarcely be desirable. Supposing that the 'vast unity,' which our author himself admits to be 'not yet discoverable or nameable,' is really the God whom we seek to know, and supposing it were discovered and named, so that (to take the simplest department only) all known quantitative laws-those of the velocity of falling bodies, of the diffusion of gases, and a hundred others-could be embraced in a single formula; it seems certain that interest in Nature would then and there begin to decline. The forward path would be closed; search and pursuit would have lost their great incentive; the imagination, set in motion (as our author describes it) by glimmering regularities and suggestive analogies, would find its function gone; and worship of the hugeness of the conception would fade away in an atmosphere of unaspiring familiarity.

Fortunately there seems at present no danger of the various forward paths converging on this paralysing goal; laws, like objects, stand side by side, e.g. those of magnetic currents and those of heredity; and nothing like an all-embracing unity presents itself. But then in ceasing to strain after the idea of unity we cease to find mere

regularity so very imposing. How is invariableness of operation in Time a grander idea than mere size or distance in Space?—of which latter one of the most imaginative as well as one of the ablest of recent men of science, the late Professor Clifford, declared his unmitigated contempt. He would certainly not have prostrated himself before the geological millenniums and the stellar distances to which our author oddly points as bringing the greatness of God home to us by the fact of its having been actually computed. And a case like Clifford's would almost alone serve to show that, if there are occasions when these conceptions overpower us with a primitive unreasoning delight in which the utter relativeness of vastness in Space and Time can be forgotten, such experience is something to be just accepted in thankfulness, not to be reproduced at will, or pressed on others in the way of a truth or a duty; for the cold touch of reason may at any moment make it look both illogical and vulgar.

Against such objections our author would perhaps still urge the scientist's actual devotion to his employment. Luckily for us mortals, such devotion, in the sense of an ant-like impulse towards the day's work, and a certain solid con-

tentment in it, is far from rare. But ants must not despise one another; and while any busy man may feel for vapid idlers the sort of contempt here specially attributed to students of Nature, it must surely be exaggeration, in these days of specialism and division of labour, to describe the feeling of an average man of science towards an average man of business as 'the pity of an apostle for a heathen.' Our author scornfully regrets that men who might be scientific discoverers often 'end ignominiously in large practice at the bar.' It is, of course, a loss to the world when rare talents are wasted on work which does not demand them; but that is not now the question. What we are considering is the worker's normal attitude towards the object of his study. And experience, I think, shows that the scientist's devotion to science is not normally devotion to an 'infinite Unity' or a 'beatific vision'; that in fact it partakes about as little of the nature of worship, and about as much of the nature of interested and healthy activity concentrated on successive limited points, as the intelligent lawyer's devotion to that extremely unscientific and un-unified object, the Common Law of England.

This somewhat unreal treatment of the pursuit

and pursuers of scientific studies might more readily pass muster as the outcome of the author's sanguine and powerful imagination, did it not directly connect itself with deeper flaws in his argument. Thus he perpetually urges on us the comparison of the scientific attitude towards Nature and the old Hebrew attitude towards the Eternal. But must not the religious sense of awe in the Jew have had at least some reference to the conviction. so strikingly and repeatedly expressed, that the ways of its Object were not only higher than his ways, but unsearchable, past finding out-a conviction which would scarcely enliven the occupation of the scientific investigator? Again, a great point is made, in this comparison, of the fact that knowledge of natural laws is the means of securing the maximum of safety and well-being in life, so that scientific men describe knowledge of Nature as of no less paramount importance than Jewish prophets described worship of God. But such knowledge the author himself represents as directed mainly to prevention and circumvention, and as resulting in a 'transaction with Nature,' a 'propitiation' of a blind and inhuman Power, which might crush us but for our cunning and pliability. Surely, then, when one passes on from the special

knowledge, and the knower's application of it, to his general emotional attitude towards the Power itself, we shall hardly see there any very striking parallelism with the Jew's confident self-abandonment to an initiating, disposing, and protecting Providence. This further topic, however, of the inhuman or anti-human aspect of Nature will find a more convenient place in the sequel; and from Science we may now pass for a moment to Art.

Here there is less to complain of, as far as the description of the worshipping attitude is concerned. In mere point of quotable authority, the gospel of Beauty has great advantages: Goethe and Schiller, the very word 'Hellenism,' are far stronger reeds to lean on than any supposed declarations of scientific agnostics and sceptics 'that their pursuit tends to worship.' It is indeed beyond question that the habit of enthusiastic admiration is a much more real, natural, and necessary characteristic of artistic than of scientific activity; while for the world at large the difference is even more marked. For, in the first place, a very far larger amount of direct labour is necessary for really intelligent glimpses of the unities of Nature than for the true enjoyment of some form of Art; and, in the second

place, those persons are exceptional for whom, through a natural bent of mind, the admiring awe, say, in the conservation of energy can fill up and transform as many moments of life as the admiring delight in favourite poems, pictures, or melodies, And this difference will only come out more strongly, if it exists in spite of adverse conditions, and if Art in our day is really handicapped (as our author suggests) by having a less robust set of professors, and so presenting less of 'healthy and manly vigour,' than its rival Science. But if the character claimed for Art is tolerably secure on its own ground of Beauty, we cannot but feel a little of the old unreality at the point where it is carried beyond that ground, and made to help out Science in the proof that Nature, with all its faults, can still be worshipped for being awful and One. We are told that, owing to the appearance of this feeling in Art towards the end of the last century, artists for the first time 'began to feel that their pursuit was no desultory amusement, but an elevating worship.' The clear sense of 'something priestly and prophetic' in the poetic mission is dated from the age of Goethe and Wordsworth, and has 'increased the self-respect of artists ever since.' This is a puzzling argument. It cannot, surely, mean

that this sense of a unity in Nature has a more exalting influence than other, and especially than supernatural, conceptions have had and can have, where they did or do exist. 'Desultory amusement' would be an odd description of the art of the Eumenides, the Œdipus Coloneus, and the Divina Commedia. Our author has himself expressly shown how in Æschylus and Sophocles 'religion and patriotism were undistinguishably blended': he remarks on the Christian orthodoxy of Michael Angelo, and Dante, and Milton, and how Æschylus and Dante 'were greater than the Sceptics'; he draws attention to the fact that when the fervour of Pagan Religion, as such, became impossible in Greece, 'the great imaginative poets come no more.' One cannot but reflect that on his own theory there was a glorious opportunity for them to reappear in the succeeding century, when the scientific and unifying study of Nature was receiving from Aristotle the most momentous impulse it has ever known; but let that pass. As applied to our own century, the argument, if it is to do the work required of it without ignoring the inspiration and dignity that poetry may draw from supernatural conceptions, is bound to mean that poets who have definitely turned their backs on

those conceptions, and so have foregone that special inspiration and dignity, have been rediscovering their inspiration and dignity in the apprehension of Nature as a vast and single Power. Nothing less than this will serve: for it is futile to suppose that in a poetical mind where the supernatural conceptions exist, they can be shut off in a separate compartment, and a complete view of Nature be evolved without them; and the page in which our author is reduced, by the exigencies of his argument, to eliminate from Wordsworth's view of the Universe the Christian faith which in the same breath is described as having 'preserved him from pessimism,' is perhaps the only approach to a juggle in the book. when we look at the poets of exclusively 'natural' Nature, does the account at all hold? Is it any awful Unity that they reveal to us? Is it not, on the other hand, in the Pagan qualities of Nature, in her beautiful and sensuous aspects, that Mr. Swinburne and his fellows have sought and found their inspiration? Beyond Goethe, the most companionless of great men, can our author point to a single instance in support of his contention? while even in Goethe, the indifference to the moral principle. to which he himself draws attention, is fatal to the sense of Unity as he describes it.

Further difficulties suggest themselves in respect of the place that Art would hold in our author's ideal community; where 'every one would have some object of habitual contemplation, which would make life rich and bright to him, and of which he would think and speak with ardour.' As regards pictorial and plastic Art, its relation to the religion of the future seems equally full of doubt whether the religion be 'natural' or 'supernatural.' It is hard to imagine an appropriate mythology, and therefore a mode of concrete embodiment, for the spiritual elements of such defecated 'supernaturalism' as may reject the dogmas and miracles of current religions; while at the same time we have no assurance that apart from such elements the arts of visible representation can enjoy the widest and deepest sort of popular life. And as regards the place of the other art of representation, Poetry, in a community where Morality is as natural and little noticed an element as the air men breathe, there is a deeper and more disturbing question. It may dispense with supernaturalism: can it dispense with evil? How far, judging from experience, may not its scope and sublimity be held to depend on the existence in the world of a large proportion of sin and suffering?

Life is to be indefinitely brightened; but can a great and various human literature dispense with shadows as completely as Fra Angelico's pictures of angels? Will Othellos be written when Iagos are impossible? Will Satan be an epic hero when he is impotent? Does it not look as if the levelling up of life to conditions where mental and spiritual conflicts will have largely ceased in attainment and contentment, must level down a large proportion of the great poetic heights? So far from the mark of this ideal community being, as our author prophesies, that genius will be 'of ordinary occurrence' there, may not imaginative genius lose its material in the absence of contrasts, just as humour would in the absence of incongruities? And may not days of full contentment prove unfavourable to moments of rapture?

To pursue these questions would be here out of place; and I gladly turn to the third department of life—that in which our author shows himself in his full strength—the department of Morality, or Religion on its social and political side. It is here that his strong imaginative grasp of history, and of large aspects of human nature, gets its fair chance; and the defects in his argument which may invalidate his conclusions as to present and future possi-

bilities will still leave his work almost unassailable on purely historical ground. What, for instance, can be truer than his glance at the opposite errors of Fatalism and Titanism, at the fate of the men who underrate and of the men who overrate the effective force of their own wills? How striking is his range of illustration; e.g. where the quality of determination to accept the truth of the Universe. however disagreeable, is exemplified in the attitude assumed towards the lying court-prophets, towards Pharisaism, and towards the secularised Middle-Age Church, by the Hebrew prophets, primitive Christianity, and the Reformers! What reality he gives to the conception of Hebrew prophecy, not only in its continuous grasp of social and political phases, but in its limitations; e.g. its failure to recognise that even a prophet may be something else besides true or false, namely, mistaken; and its denunciation of the worship of natural forms, addressed to a particular nation under particular conditions, and therefore irrelevant to the truly religious element in Greek nature-worship! Even if we demur to the summing-up of Jewish history as 'the dealings of a certain human group with Necessity,' how impressive remains his picture of the Bible as a whole, as one book, treating of the chequered VOL, I.

fates of a nationality which merges at last into a world-religion; as an 'Epic of Human Action' with a practical and temporal aim, exhibiting through a history of centuries the fundamental antithesis of inspiration and rules, of living and dead Morality, and leaving it 'in the act of revolutionising the world'; but also as a fragment, peculiarly likely to be misunderstood and abused by literal and limited interpretations—so that the attempt of the Puritans 'to rise once more to the same general view of human affairs' fails, 'because they have no clue to the centuries immediately behind them'! What width and clearness in his views of the formation of theologies and religions; shown, e.g. in his passing description of the older theologies as busying themselves quite as much with laws as with causes, and drawing no sharp line between natural and supernatural events, and of the gradual change of method through which Science assumed the domain of law, and Theology of supposed suspensions of law; and again in his account of the distinction between scientific and imaginative knowledge, and of the unfortunate consequences to Religion of the earlier predominance of the latter; and, above all, in his disentanglement of the two conceptions mixed up in every moral re-

ligion—laws, including penalties, and the worship of Man-specially illustrated in the rise of Catholicism, the 'marriage between Rome and Jerusalem,' and in the 'Christian legalism' which was bound to supervene, where 'the free morality' had become the religion of races only just ripe for the legal stage! What novelty he can give even to trite themes; e.g. in his notice of the inherent pugnacity and mutually destructive effects of partial religions; and in his admission that Religion, like originality, is apt to be troublesome, and has been at times more mischievous than the cynicism of Secularity, while yet 'the life of the soul' is vindicated in the ardour that characterises all religions, not merely true religions! And with what rapid and pregnant touches he brings out order among the crossing and confusing currents of the great stream; e.g. in his brilliantly-drawn-out comparison of the higher Paganism, of primitive Christianity, and of Science, to the three stages' of childhood, youth, and manhood, and especially his vindication, as against Schiller, of the faults of Christianity as those of youth, not of old age: in his contrast of Paganism as it appeared in its decrepitude in the older civilisations, and in its new birth as a corrective of the Christian and monastic reaction; in his

brief sketch of Religion as the great state-builder, from Moses, through Mohammed, Gregory, the Teutonic reformers, the pilgrim fathers, on to the prophet of Utah; and especially of the primarily national and revolutionary character of Christianity. of its compromise with Rome and the grandeur of Latin Christianity-that Holy Roman Empire which 'is to Rome what the Christian Church is to Judaism, the resurrection of a fallen nationality in an idealised shape'—and then of the gradual break-up of the consolidated world-church, and the spasmodic efforts of national states, as in Scotland, and even in the France of the Revolution, to preserve the idea of a public religion! How trenchant, again, are the criticisms in which his views of the past are brought to bear on the present; e.g. his exposure of the vague and idle notion that there might be a sort of return to classical Paganism. as though it had been the invasion of a Semitic religion, and not the inevitable course of development. which put the old fascinations to flight; his demonstration of the fortuitous nature of any apparent alliance between the misnamed 'atheistic' tendencies of modern Science and the modern spirit of Revolution; his conception of the aspect that our national faults may present, when magnified in

the total working of one nation on another, as of England on India; his exposure of the want of free adaptation of means to ends in ecclesiastical politics. seen in the fantastic revivals called reformations. made by 'those who cannot see the end,' and so 'fix their eyes, as the next best thing, on the beginning'; his scorn of the hollow apology for private sects of supernatural religionists in a secular state, that they are a return to the conditions of primitive Christianity—to the conditions of the Church which 'defied and vanquished philosophy,' while 'its modern imitation is retiring before it,' and the 'private judgment which the apologists appeal to is on all hands rejecting supernaturalism'! impressive, too, if we can look at the words simply as they would strike us in a book of history, is his description of nationality as a sort of atmosphere round individual members of a nation, which, when any shock makes the individual conscious of it, becomes religion—a thesis characteristically illustrated by the transformation of the Jewish nationality into Judaism by the waters of Babylon, and by the behaviour of the American in Europe preaching America in season and out of season! And how skilfully he uses the history of great institutions, springing up for the most part in an unreasoning

and half-conscious way, and flourishing without fear of damage from antiquarian researches so long as they have a visible and palpable use, to support his conception of a Church, not as a society where membership depends on opinions, but as a social organism into which a man is born, able to be disowned by him only when it refuses to make itself coextensive with culture and civilisation! How convincing, lastly, are the passages where he touches on the absence of any firm conception of the origin, raison d'être, and future of the State, and of any such general view of human affairs as Hebrew prophecy in an archaic manner supplied; and where he urges that history can only cease to be a chartless sea, on which men take short aimless voyages or from which they shrink back appalled, by vindicating the interpretation of human society not only as its proper business, but as a prime part of religious teaching!

But this instinct for viewing things historically, which lights up so many portions of the argument, seems in some degree answerable for what I cannot but think a grave weakness in the argument taken as a whole. For, after all, the great problem which our author is facing is the problem of the present and the future; he himself emphasises this again

and again. Our need, and his, is for a religion which the most civilised men of this generation may recognise as the common essence of views and sentiments hitherto regarded as disparate or antagonistic; in order that, having recognised it, they may promulgate it among their less enlightened fellows. Either there is or there is not such a religion, latent, or rather dispersed, in the actual views and sentiments of existing men. If, as our author holds, there is such a religion, which only needs to be set free and consolidated, it must have certain qualities in relation to the advanced class of minds which are to recognise and propagate it; and the meaning of its principal terms, such as 'God' and 'worship' and 'religion' itself, must be a meaning which these advanced minds, here and now, do or can naturally attach to them. Now, that these same terms have borne other and lower meanings in relation to less advanced minds may be most interesting from the point-of view of history and development; but unless we are careful to distinguish our historical inquiry into what has been from our examination of what is or can beto distinguish our survey of past religions from our search after that particular thing which we can hold, here and now, to deserve to be known and preached

as Religion—those other meanings which the term has included will be apt to confuse the idea of this new thing which we are to denote by it; even as in Ethics we are familiar with the confusion that results from mixing up questions about the original elements and historical formation of Conscience with questions about its nature and authority as a present fact. Now, in his account of Religion our author seems unconsciously to take advantage of ambiguities incident to this double way of regarding the subject. Thus he points out that benevolence has not always been thought one of the necessary attributes of God; therefore, he argues, benevolence cannot be regarded as part of the necessary connotation of the name God. Perfectly true; historically, of course, it cannot be so regarded. But this slips on into the conclusion that we, here and now, can worship as God a scientific order of things towards which, according to the author's own admission, our natural feelings may be at their best 'fear and cold awe,' and at their worst dread and despair-a conclusion which no amount of history can justify, simply because the point is one on which we interrogate, not history, but the minds and hearts of ourselves and our contemporaries.

'But,' it may be said, 'though benevolence is

not an attribute of impersonal Nature, it is an attribute of Man in his moral aspect; and Morality is one of the essential factors of the new "Natural Religion."' This, however, only brings out the inherent flaw in our author's composite definition of Religion; and the point demands particular attention. It is on regarding the elements of Religion as a whole that he specially insists: this is the distinctive point in his view. 'Man,' he says, 'has still grand spiritual interests, which are allimportant to him, and which he partly feels to be so; only to his misfortune he has ceased to think of them together in the whole which they constitute.' It is to the breaking up and distribution of its elements 'under other names or under no name' that he attributes the attenuation of the meaning of Religion. But things which are confessedly distinct can only be bound into a whole by some principle of union, external or internal. The orthodox view of God or Providence is a real bond, though an external one. He is regarded as a common originator, the source of goodness and beauty as well as the ordainer of laws; and in his case the disruptive shock, produced by the fact that in their operation the laws often show themselves the reverse of good and beautiful, can always be

parried for many minds by the doctrines of probation and future compensation. Usually the fact that we, in our relative and conditioned lives and enforced balance of pleasures and pains, often declare that pleasure in the present 'more than counterbalances' pain in the past, is taken advantage of, projected into the future, stripped of its relative character, and made a justification for the absolute sum-total of evil in the Universe. Even those whose logic refuses thus to embrace creative goodness and created evil under a single scheme, may still find in the mere notion of Omnipotence a bond for the discordant elements. For there is nothing incompatible between power and caprice; and it is a coherent view that things which move us to delight and admiration, and things which to all eternity would seem to us ineffaceable blots on creation, have both emanated from a source more or less indifferent to our susceptibilities. But such a bond is denied to the elements of our author's religion; for the simple reason that one of these. Beauty, is directly founded in man's feelings and in his inalienable susceptibilities to pleasure and pain, and another, Moral Goodness, is indirectly so founded, and that these are presented as co-ordinate with the third element, the dominance of Immutable

Law. Here, then, the discrepancies between what we approve and what we find in the world cannot be subsumed under any community of origin, or swallowed up in any uniting hypothesis. We cannot appeal to Omnipotence. For however much we acknowledge the overmastering force of natural law, and our own practical submission to it, we have admitted into our Religion, as co-ordinate with the recognition of that objective law, the recognition of something else which is not practical and objective, but experiential and subjective, namely, our own feelings of approbation and repugnance, before which Omnipotence is powerless, or rather is meaningless—a power that should make us approve of uncompensated pain, of that the essence of which is to be objected to, being not so much an impossibility as a contradiction in terms, and none the less so for being called Omnipotence,

As long, then, as we reckon feelings, as well as objective facts, among the elements of which our Religion is to consist, we find for these elements no inner bond capable of replacing the external bond of supra-human ordinance; and the discordance can escape notice only so long as we take a resolutely one-sided view of Nature. The

Eternal and Immutable cannot be cut in two; and as soon as natural law, in the shape of a complete set of facts, is set side by side with the joyful feelings that some of the facts inspire, and we are told to worship the combination, the opposite sort of facts insists on putting in its claim for recognition, and the combination falls to pieces. We may pour our oil and vinegar into one vessel, but we shall not, by so doing, conceal their antagonistic nature, or come to regard them with a homogeneous feeling. If they are to combine, it can only be in the menstruum of a supernatural theology.

And in the present instance the pouring them into one vessel, be it observed, is a purely voluntary

<sup>1</sup> I may be told that it is not facts, but their abstract unity, that we are to worship. But this position is one to which our author does not keep at all consistently, and which, moreover, is only plausible so long as it is vague. The inspiring unity must obviously be a unity of law; for no one could feel inspired by the bare idea that a number of different things are included in a single sum-total of things. But then, as we have seen, no such single unity of law presents itself. And the more we concentrate ourselves on the separate or subordinate laws, the more difficult is it to work up any large emotion towards them in abstraction from their effects on human senses or on human fates. Nor does this apply less, but rather more, if we attempt to regard them under an aspect of unity which our author often substitutes for that of regularity, that, namely, of an external Power or Necessity. For since we interpret the notion of Necessity from within outwards, it seems to contain the relation to ourselves at its very core; so that any emotion connected with it is peculiarly unable to leave that relation out of account.

act on our part; they are not so given us. A consideration on which our author more than once dwells suggests the exact difference. He rightly insists that among the contents of Nature we must include Humanity itself, and the slow but sure development of altruistic sentiment and social order. These, then, may be rightly ranked under a common name with things as different from them in the sentiments they inspire as plague and earthquake, so long as the name employed has no reference to the inspired sentiments. Such a common name is Nature: it is a uniting conception. external to our sentiments, between things which have, whether we love or hate them, the common quality of occurring or appearing in obedience to immutable laws quite independent of our individual will. This unity is one in the making of which we had no concern, and in which, therefore, things towards which we entertain the most opposite feelings may be forced upon us side by side. Religion, on the other hand, only has value for us as a principle of unity produced in our own hearts, and embracing things towards which, whether we regard them as attributes and actions of a single supreme Person or as distinct phenomena, we experience a common feeling of ardour and devotion. It was

thus a true instinct which led Goethe, to whom our author points as the great seer of the unity of things, to preserve his conception from disintegrating influence by steadily turning his back on ideas of suffering and sacrifice. The worship of a unity of facts, apart from a unity of feeling, has as truly the note of superstition as to worship some single fact or object, e.g. a reptile, that one dreads or dislikes; and to call it religious would be to fail in distinguishing Religion, as something to be acknowledged here and now, from the historic religions in which such superstitions have freely mingled.

If I seem to be pedantically pressing what after all is only a verbal point, I might at least reply that the importance I have attached to the matter of definition in no way exceeds that attached to it by our author himself. In his preface he attributes much of the disastrous contention which he deplores to the want of a true definition of Religion; and it is by means of just definitions that he hopes to show the fundamental agreement between those who believe that they are hopelessly opposed. But if words are of importance even here, where our author believes that this fundamental agreement already exists, still more must they be so where it as yet does not exist;

and the words used have a weighty bearing on the actual propagation in an ignorant or hostile world of the truths on which he insists. We may admit those truths to the full, and still inquire what sort of difference in the practical acceptance of them will result from their being preached as a religion. Especially, how would such a mode of presenting them be likely to affect the revolutionary part of society, to whose enlightenment our author naturally attaches the greatest importance? Viewed in this light, it seems to me that no more dangerous word than 'Religion' could be selected, under which to rank things as different as, on the one hand, the glow of healthy pleasure from an unselfish action or from a work of art, and, on the other, the fact (in our author's own words) that 'if we could measure all the misery there is in the world we should be appalled beyond description.' realisation of this latter appalling fact, which is as much an exemplification of natural law as that the sun will rise to-morrow, may be quite as important in the interests of mankind as access to the former sources of pleasures; but the attempt to bring them all under one grand conception, and to carry them all down in a lump by the impressive connotation of the word Religion, seems not only unreasonable but prejudicial. In the attempt to be grand and impressive, our appeal will lose the strength which would belong to it on the humbler ground of literal truth. It is as though one should try to get a child to swallow medicine by giving it at meal-times and representing it as food; which would merely produce in him a distrust of food in general, without making the medicine any the more palatable.

And as regards this question of preaching the godhead of Nature to the poor and needy, we must remember that in proportion as the conditions of a man's life are hard and narrow, is it impossible that he should take our author's all-round and impartial view of Nature. The view from the Brocken at which Goethe gazed, the gorse in bloom before which Linnæus knelt, are not for all: they would not be for all even could they be physically presented at will. Absorption in the imposing and cosmical aspects of the Universe presupposes some considerable degree of leisure and comfort: the mind, like the body, needs room to expand. We shall not reconcile men to the rigour and narrowness of their lot by pointing to the stars; but by appealing to their sympathy with their kind, and by opening up for them an imaginative interest in the future of this planet, through indications that the conditions of life on it are slowly improving. The religious imaginations of a favoured few, soaring above mundane things, may be able to find rest and support in the Cosmos; but if for the large majority of human toilers and sufferers the shelter of this half-way house is bound to fail, the religion that cannot reach Heaven will find its account, like Antæus, in keeping to the earth. And within this narrower circle the distinction, for religious purposes, of the personal centre from that which encompasses it becomes still sharper; for the terrestrial environment contains plenty of what is far more alien to the idea or possibility of worship than the unoffending It is only by distance that the hostile and depressing side of Nature's character vanishes. Poets may praise the moon for her beauty, without thought of her bleakness and sterility, and the many will merely remain indifferent; but if the earth and the life on it be so praised, the many will rebel.

The lesson must, of course, be learnt, as our author plainly sees. Of the texts which he suggests for the teachings of his 'free clergy,' one of the first is that the path of happiness for the indi-

vidual is and must continue a hard one, and that it is not blocked by simply artificial barriers, or able to be cleared by any sweeping change in the present social fabric. This is a most important thing to inculcate, and there is nothing to hinder any one from setting to work at inculcating it; but it is a piece of hard and repulsive common-sense; it belongs to the laws of Nature, but not of Nature as in any way worshipful. Even a preacher who took his texts from our author's own pages might find them somewhat less than inspiring. It may be a consolatory, but it is hardly a religious, suggestion that 'we become insensible to whatever evil does not affect ourselves'; nor would the apology for life, that 'though the happiness in it is not great, the variety is,' be a hopeful theme to expound to a congregation of factory-hands. The thought that for very long to come many lots must perforce remain hard and narrow, and that perhaps for ever happiness in life will be to many but a transient bloom, forces to the front an aspect of natural law which it seems like mockery to dignify with any sacred name. There is no dignity in privation and suffering, regarded as mere pieces of unavoidable fact. The Christian, in taking up his cross daily, may find that he can thank God for the cross as well as for the strength to bear it. But he is enabled to do this solely by that confidence in the ultimate designs of Providence which the hypothesis before us excludes; his cross has dignity and sacredness as part of the design of a personal and moral Being. If the mere slave of Destiny can ever be said to bless his cross, it must be simply provisionally, as a means, a school of discipline for learning endurance and so reducing the burden of future crosses—i.e. for reducing something which the very fact of his seeking to learn so to reduce it shows that he regards as essentially an evil. And the moral worth of his attitude seems merely degraded and obscured, when the 'natural' weight and hardness of the cross. and the pitiless laws of weight and hardness, just because they are eternal and irreversible, are put on a sort of equality of excellence with the human qualities that resist their pressure; and are even combined with the very virtues which prevent the spirit from bowing beneath them, into an object of enthusiastic contemplation before which the spirit is to how

But there is another and still more vital objection to this compound religion. Religion must be for all: it must be looked on by its members as

within the reach of all. A Utilitarian may find it possible to hold that conscious existence is desirable on the whole, and that his principle is being carried out in it, if only the number of lives in which happiness preponderates exceeds those in which the balance is irretrievably reversed; 1 but he will not go so far as to demand from one of these hapless and uncompensated individuals any attitude towards such conditions but one of sick rebellion. Such an attitude will only be regarded by him as part of that unfortunate lot which, while regretting it, he holds to be an inevitable item in conditions that are on the whole desirable: and it will thus introduce no fundamental discord into his view of the Universe. But then he does not, or will not if he is wise, call his view of the Universe a religion. The connotation of that word seems alien to the very possibility of such exclusiveness. It seems impossible for any one who holds a body of beliefs and sentiments in the manner for which our author contends-the only manner, that is, which justifies the treatment of them as a religion—consciously to admit that for others a similar holding of them is absolutely out

<sup>&#</sup>x27;That this is not necessarily his view I have argued in a later Essay on The Utilitarian 'Ought.'

of the question, and that consequently his 'religion' is one in which these others are for ever precluded from sharing. I am only vindicating for 'worship' the unique and lofty sense which our author throughout ascribes to it, when I say that a God whom we cannot all worship is a God whom none of us can worship. In the very act of admitting that to some, through no fault of character or perversity of judgment, he is, and must be, the reverse of worshipful, his worshippers cease to worship him. So fundamental is this catholicity in the very notion of a lofty religion, that the notion dissolves in the presence of even a single case where the catholicity fails. Touched by the mysterious implacable reality of a single life in whose owner's refusal to worship we can see no moral or intellectual flaw, the divinity to which our souls have clung becomes a cloud.

It will be no valid answer to this to say that the individual's power of worship overflows the limits of his individual lot—to point to instances showing that, even in the absence of supernatural hope, incurable personal ill does not necessarily produce a spirit of rebellion, or a yearning for general annihilation. I do not deny that the enlightened Sceptic no less than the blind devotee may thus occasionally cast

himself under the car of Juggernaut, and that the self-devoting impulse of the human spirit may make a car of Juggernaut even out of such an abstraction as Destiny. Even so, it would be hard to prove that in his conviction of the inexorability of that Destiny there lurked no shadow of doubt as to whether his eyes were truly in sight of the ultimate issues of things; and such a doubt means hope. But let that pass: grant that we approve and admire such a spirit: what is it that we admire? It is surely the love for humanity, the sympathy with others' welfare, which the sufferer is able to oppose to his own fate; and the religious and worshipful character of such love and sympathy I have not for a moment called in question. What I question is the religious and worshipful character of the fate itself. The inhuman fate and the human feelings, the very things which our imaginary humanitarian wins our admiration by opposing one to the other, and which I regard as essentially opposed, are the very things which our author unites, under the theoretical title of divinity and by the practical claim for worship. If he ever gets the humanitarian to profess agreement with him, the spectacle may be sublime, but it will be neither logical nor religious; for, keeping steadily in view

the point under discussion—which is the attitude of the innocent sufferer towards nothing more nor less than the laws by which he suffers—we might fairly say that, so far as his attitude was not one of aversion and even hatred, it partook rather of the nature of fanaticism than of religion. If we call the spirit of wanton self-immolation 'religious' in the Hindoo, it is with distinct reference to his want of enlightenment, and solely by that relative and historical use of the word to which I have already adverted—a use quite out of place in the gospel of the enlightened future.

The result of our author's welding of non-personal law with personal virtue in his 'natural' object of worship seems, in fact, simply to mar the true and beautiful aspect of that other great gospel of the future which is in its way a 'natural religion'—the 'Religion of Humanity.' Positivism, though it does not profess to grapple with the mystery of evil, at least does not bend the knee before the system of natural law of which evil is a prominent feature: indeed its most popular English exponent has treated even the more majestic aspects of 'cosmic emotion' with very scant ceremony. The consequence is that the religion of humanity is, up to a certain point, one in which all may share; it has

that essential note of a religion. Many may find it inadequate; but no one will be excluded from it by discovering, in the deepest depths of his personal experience, the incompatibility of the elements he is asked to unite. Whether the unique religious sentiment on which the Positivist no less than our author insists can permanently exist towards a Being whose gifts to us, as individuals. have come from no personal love and comprehension, and who, for all our service, is powerless to help us in the direst straits of life, is a separate question. But even those to whom the apparently uncompensated evil in the world is too huge a fact for a 'religion' to pass by with regretful acquiescence, who find the mingled peace and ardour which belong to true 'worship' impossible on such terms, and who cannot recognise the living head of a spiritual kingdom in an image wrought of even the finest human material, merely because it is bigger and grander than themselves, may still feel that the dream of such a deity is an imposing one; and that the element which our author would contribute to it is one rather of weakness and disunion than of dignity and strength-not so much the head of gold as the feet of clay.

The language I have used may seem to some

unduly pessimistic: at any rate, it may be said, if some things cannot be remedied, the less they are thought about the better. It would be easy to reply that the very prominence which one is impelled to give to these things may fairly be reckoned among the practical ill-results to which a deification of impersonal law leads. The one is the natural answer to the other; for if ever there is an excuse for calling attention to Nature's darker side. it is surely when one is asked to worship her. But in the present controversy no such excuse is needed: the book before us contains passages which make it impossible to doubt its author's own intense realisation of that darker side. In addition to remarks already noticed, I may refer especially to the place where he recognises how easily the existence either of individuals or of whole communities may sink below suicide-mark; and to the concluding pages in which he himself describes the pessimistic position. This man sufficiently shows that, whoever else may, he at any rate does not sit light to the significance of irremediable evil, nor escape the chill blight under which 'others,' and so the panacea of feelings and work for others, become infected in our eyes with the paltriness and transience of our own personality; while at the same

time the spirit of courageous wisdom which breathes through all his pages shows how little ground honest clearness of vision on such matters need afford to the usual charges against pessimism. But that he recognises the rock of offence only makes it stranger that he should imagine himself to have got round it. All this grief and pity at things as they are, and desire to have them otherwise, which are such real elements in his own mind. have been kept in abeyance in the passages where he insists on confronting now an 'atheistic' conventionalism, and now a paralysing pessimism, with the vigour and enthusiasm of worship-taking no account of this tertium quid, this grief and pity, which is neither of the opposed terms; which is entirely remote from the enthusiasm of worship, and yet so little paralysing or conventional that it may be the very life-blood of the enthusiasm of duty.

An impression is in fact created by particular phrases, as well as by the general treatment, in the latter part of the book, that the writer's eminent sanity has interfered with his keeping steadily in view the depth and height of the meaning attached by him, in the first part, to the chief terms of religious phraseology. Nothing, for instance, could be

more reasonable than to include, as a main subject of popular teaching, the demonstration that 'the institutions left us from the past are no more diabolical than they are divine, being the fruit of necessary development far more than of free-will or calculation.' Yet, so far as they are matters of necessary development, these so-little divine institutions are parts of an order so divine that in the earlier chapters we have been bidden to call it God. Again, when insisting on the recognition of that law of Nature which is independent of us, on the acknowledgment that 'the universe is greater than ourselves, and that our wills are weak compared with the law that governs it,' he says that the lesson 'ought not to be mastered as a mere depressing negation, but rather as a new religion' -with perfect justice if 'religion' could mean merely the set of conceptions and emotions by which our lives may be most wisely adjusted, but surely not with justice if it is to retain in its connotation the habit of enthusiastic contemplation. 'Great' is a conveniently vague word; but worship is too peculiar and personal a feeling to admit among its objects two standards of greatness; and to worship two masters is harder even than to serve them. If we make the attempt,

we find at once that either Nature or Morality must be sacrificed; for by the standard of the latter an impersonal and unmoral Universe is not 'greater than'but less than ourselves. And again-strangest instance of all-in the very act of recognising the sense of an unmoral Power outside us as one which does, and well may, strike man with terror and 'eternally trouble his repose,' the author thinks it enough to add that the word 'religion,' in its ordinary usage, is not taken to include this aspect, and that such feelings belong rather to 'superstition.' That is to say, this exponent of the 'egregious mistake in nomenclature' by which 'religion' has been wholly diverted from its proper meaning, this champion of Religion as inclusive of our whole feeling towards Nature, is found overleaping the radical objection to his own definition on the crutch of that limited and perverted usage which it is the aim of his whole treatise to supplant,

The so-called unity, which will survive the recognition of the 'natural' God as the power of corruption, reaction, and barbarism, no less than of beauty and progress, may seem the stranger for the doubt whether, even on our author's own ground, it was necessary. What drives him to conceive the divine power, whether external or immanent,

as nothing less than coextensive with Nature? Is there no distinction between deadness and life? Is it only in metaphor that Evolution could be described as not merely a gradual process but a gradual victory? Is the idea of a divided Nature. and of a divine Being working itself clear from stubborn elements of grossness and imperfection by a process in which it is for us to share, too absurd even to be mentioned? Perhaps, however, this spiritual development could have no interest or meaning for those whose spirits are to have no continuing share in it, so that any such transfigured Manicheism is excluded from a purely mundane religion. The same honest determination to keep to the most rigidly mundane conceptions, to find common religious ground for as many persons as possible by 'taking the scientific view frankly at its worst,' must further, I suppose, be taken to explain the exclusion from the argument of all metaphysical along with all supernatural views. 'At its worst' may perhaps be intended to mean 'at its least philosophical,' as well as 'at its least obviously religious'; whence the conspicuous absence of any hint that the 'what' or 'how' of Nature has ever been a philosophical question, or that any view of the external world other than the

crudest realism of 'common-sense' has ever been put forward. Or is it possible that a suspicion, inevitably suggested by the description of the scientific position in the opening chapter of the book, is really well-founded; and that the 'philosophy' which would transcend the dualism of mind and matter is to our author no less than to the scientist as much an object of scorn as the pseudolearning which he brackets with it, the 'erudition' and 'commentatorship' which create dogmas out of the untested dicta of the past? In either case, one cannot but remark that resolutely to ignore the philosophical standpoint is scarcely the most hopeful or legitimate way of lessening the gap between the thinkers and the masses, which he regards as so ominous a sign of our times.

And now, to pass to a final topic—one which the concluding pages of the book make it impossible to avoid—how do the peculiarities of the author's view of Natural Religion affect its relation, which he so prominently suggests, to Supernaturalism? (I adopt this last unfortunate and meaningless term, as I suppose he does, because common usage supplies no other single word for the suggestion of supramundane existence and hope.) First, then, must not the disintegrating

effects of that jarring unmoral element which has so long distressed us, be traced on from the Natural into the Supernatural Religion? No scientific mind can imagine the transition from the 'natural' to the 'supernatural' as a leap: it is only the selfstultifying word 'Supernatural' itself which prevents the proverb 'Natura non habet saltum' from being as applicable here as anywhere else. And it would surely be meaningless to deny to the object of our 'natural' worship—to that which we are to regard here with all the sentiments of devotion and faith that we can muster—a true kinship and continuation with that further something which is introduced expressly to give their fullest scope and satisfaction to those very sentiments. Hence a teacher like Dr. Martineau, who is quite in agreement with our author in regarding 'Supernaturalism' not as the root but as the crown of moral life, can bring in his supernatural religion as a thoroughly invigorating and irradiating influence, because as a necessary means for the further continuance and development of the moral nature, and for the satisfaction of unsatisfied moral cravings. With such a teacher, Supernaturalism is immediately akin to the spiritual element in life which at once suggests and warrants it, and includes

both the explanation and the necessary issue of that spiritual element. But how different is the case when an unmoral and unspiritual element has been included in our 'natural' object of worship! How can that element be reasonably got rid of? If 'Existence' has any continuous relation to ourselves, could it be reasonable to regard as less than a necessary condition of existence that for which, as a condition of our present existence, our very widest powers of emotional realisation have been demanded? Here, then, no special alliance of the spiritual with the 'supernatural' will be defensible. The government of the departments of the Universe which are beyond our knowledge may just as well be unmoral as that system of 'natural law' which we know. There will be no reason why a future life should imply moral purification; why satisfaction should ever be given to our yearnings for a compensating issue to Nature's myriad injustices; or why the υλη of cramping conditions should not be as immortal as the spirit which struggles to transcend it. On such terms, the intuition of the 'supernatural' had no business on our author's pages; it perishes before it is conceived; it is irrelevant to the very needs which are supposed to suggest it.

And lastly, suppose for a moment that he would consent to drop the discordant impersonal element in the 'whole' which he presents for our worship. Natural Religion would then seem divisible into virtuous action, conquests over Nature in certain directions, and a healthy exercise of the various bodily and mental faculties, on the one hand; and on the other, manful endurance of the inevitable tedium, ugliness, and evil of which a large part of Nature consists. It becomes, then, most important to realise what amount of difference will be made by the addition to these elements of even a faint intuition of a 'supernatural' Providence, and of even a bare hope of a future life. It is a difference which our author, judged by some of his concluding passages, cannot be accused of explicitly minimising: since he recognises as legitimate the doubt whether 'the known and natural can suffice for human life'-a doubt for which, as thus generally expressed, might be advantageously substituted the precise and scientific statement that for some human lives it does and will, and for others it does not and will not, suffice; and he practically admits that for many logical minds (does it need much reading between the lines to add for his own?) the new element is the philo-

sopher's stone which turns the dross of life to gold. But surely when we look back over the treatise from this final point, we cannot fail to see that by implication the difference in question has been minimised throughout, and that the pervading contradiction of the book has been here again exemplified? How many men will find that they can believe, or even half-believe, the one gospel, and throw the whole strength of their preaching into the other? This question implies no denial that Religion deals in the first instance with the known and the natural,' and no assertion that mundane morality is dependent on the survival of Supernaturalism. We may go so far as to say that, were there men who could find it possible and honest to preach one gospel as a supplement to the other. those scientists who should treat them as reactionary opponents on a vital point, instead of as the more advanced and sanguine wing of their own progressive party, would be guilty of very short-sighted and unscientific conduct. But the question is just of this possibility,—of the possibility of a common attitude of enthusiasm towards things so different as life with and life without the 'supernatural' element-towards two 'Eternals' one of which has for its essence the Love and Righteousness that

are expressly excluded from the other;—whether these things can ever to the same man seem so like each other that he can pass from the one to the other without any paralysing fall of temperature, and regard and preach the mundane gospel with the worshipful fervour that our author demands of him. To pursue into detail the radical difference of attitude which Supernaturalism carries into every corner of life, and so into every corner of that with which in either case the preacher deals, would carry us too far. It must suffice to suggest that, as addressed to the majority of mankind, the keynote of the one gospel is Resignation, and of the other, Hope.

## THE CONTROVERSY OF LIFE.

AMID the numerous theories of life which are now attacked and defended with some of the highest literary ability of the time, it might be amusing for a totally disinterested spectator to watch the various and shifting relations which the combatants bear to one other. For the crossings of opinions and sympathies in this free fight are of the most complicated kind. A champion who, viewed from the front, appears to be dealing an antagonist a terrific blow, might be seen from behind to be patting him gently on the back, while the antagonist himself is possibly writhing more under the latter treatment than the former. A combatant advances against what looks like a compact band of adversaries. and does not notice in his ardour that they are really hacking fiercely at each other, and from time to time casting friendly glances at him. The sides seem curiously inconstant. The orthodox believer in revealed religion finds the ranks of Materialism

and Positivism arrayed against him, with Mr. Huxley and Mr. Frederic Harrison, like the Great Twin Brethren, scouring the field. But let definite issues present themselves, and lo, the earnest Christian is first bewildered at finding the Positivist leader on his right hand, as he maintains that in Faith rather than in any secular knowledge lies the true secret of life. But then comes the question of personal continuance after death; and when Mr. Harrison suddenly faces about and pronounces the desire for such a thing absurd, the Christian hears a well-known voice emphatically denying the absurdity, and, looking round, perceives at his left the sympathetic countenance of Mr. Huxley.

To the eyes which actually survey it, however, the scene is rather bewildering than amusing. For as a matter of fact there are probably few disinterested spectators. Thousands, of course, go on their daily round without knowing or caring about the fray; but of those who turn a glance on it, most are impelled by their very natures to take more or less of a side, and to single out this or that champion or band of champions as representative of their cause. Many there are who see only the ensigns of their own party piercing the dust-clouds, and though distracted and grieved by the din, never

truly set themselves to appreciate the force of the opposite positions, or doubt as to the ultimate" victory. But others, with less of inward assurance, feel that uncertain and momentous issues are being fought out with stronger and keener weapons than they themselves can wield, and watch each stroke as it is dealt with alternations of hope and dread. And the existence of these straining and sympathetic eyes is a most important element in the controversy. For though in our day there is the utmost toleration of opinion, and any one who chooses may run amuck on his own account, it is natural that in dealing with matters of universal concern men should measure success by the amount of sympathy that they can win. Thus the anomaly perpetually presents itself of a dialectic demanding an exceptionally clear and well-trained intellect to follow and weigh it, addressed to the crowd in the market-place; and of the employment in brilliant and popular articles of terms which, from their very commonness and apparent simplicity. present every possible logical pitfall to the unskilful and unwary. There can be no such thing here as a technical battle of experts. The instincts and destinies of the non-combatants are the very points at issue; hence the subtlest and most difficult ideas

and arguments have to be presented in such form and language that they shall appeal to the average reasoning power of mankind, and win from them a certain amount of assent and approval. And this approval is won with only too obvious ease for whatever line of opinion has the advantage of some predisposing bias, in that large class of minds which are fascinated and satisfied by just skimming the surface of a stream of argument, and recognising their hitherto disjointed opinions and dim instincts as parts of an apparently solid and systematic whole, seen under a striking light of analogies, metaphors, and quotations.

Now this relation of the controversialists to the public has one special effect on the controversy. Every serious writer who treats of human existence holds more or less consciously a brief for it. Pure pessimism is a far rarer phenomenon in literature than it is in fact—for the simple reason that to preach pessimism, without the power of widely and successfully advocating suicide, is an antihuman task from which a man must reasonably shrink. Among a party of philosophical experts he might openly adopt such a course; among the masses of his fellow-men, never. The field is therefore left clear for those who think that something

at least can be said for the value of life—who offer some of them new bread, some stale bread, some even sour bread, but still always bread, not stones.

It will be found that a claim to speak with authority on the general problems of existence (sufficient ability being presumed) usually rests on one or other of two qualifications - study and mastery either of the spiritual or of the physical phenomena of life. But these two sorts of authority, as soon as they are examined, reveal a startling contrast. For those who treat of the spiritual side speak from a standpoint of positive conclusions, those who treat the physical side from a standpoint of negative conclusions, in relation to the deepest yearnings and the most instinctive aspira tions of mankind. Only at special moments of intellectual intoxication can Science be regarded as in this relation other than inexorably restrictive. Views as to the transcendent worth and ever-progressive evolution of the individual life-views of some importance to individuals whose lives are in question—have received so far not the very slightest countenance from physics and biology; nay, they have been made gradually harder to entertain. And till this is altered—till those views can be

based (as who can say they never will?) on some sort of objective evidence—scientific convictions must differ absolutely from religious convictions, in the response that they can evoke in human hearts and imaginations. There is nothing, of course, to hinder one and the same person having a foot in either camp: scientific research does not preclude faith and hope in the alembic of which the elements of necessity and death may yield a subtler essence of freedom and life. But in the direction of their proper activities the divergence of the spiritual and the scientific leaders is complete.

The former class consists of those whose main interest is an ideal state for men; who confidently believe that their ideal represents a reality partially accomplished already, and destined finally to complete fulfilment; and in whose sight the Universe is illumined by the light of their own conceptions. These teachers may ignore the facts or deny the deductions of Science, or may accept and appreciate both; but alike by instinct and on principle they regard other interests as wholly subsidiary to the promulgation of their own hopeful views. And differing widely among themselves, their passion for human welfare yet gives them all an intelligible attitude towards the society to whom human

welfare, at all events as represented to each in his own person, is of pressing concern.

The other class consists of those whose main interest is in the actual rather than the ideal, and whose instincts attract them irresistibly to the pursuit of the truth that lies in tangible verifiable fact. These men may be hopeful and benevolent, like the others; but to be so is not a necessary part of their natural activity; for a scientific discovery would none the less form an important item of verifiable truth if made by a selfish and despondent investigator, or if fraught with terror and misery to the human race. When, then, these workers come across the fundamental questions of life, they may preach truth, indeed, as men of science, but they can only preach peace on grounds quite external to the verified facts of the physical universe. And their social and benevolent instincts. may have a noteworthy bearing on their authoritative teachings. Discovery and proclamation of truth is the scientific man's métier; but if, to take an extreme case, a scientific man discovered that some natural and unpreventable cause would destroy the world miserably three years hence, benevolence would prompt him to conceal the truth and spare his fellow-creatures the misery of helpless.

anticipation. Such an imaginary case is sufficient to show that the exposition of truth cannot be taken as his unalterable aim and duty.

As it happens, no discoveries up to this time have pointed to near and definite catastrophes on a tremendous scale; and in spite of the verdict of futility which the physical reading of the Universe has seemed to justify on the revelations of the past, the vastness and minuteness of the physical revelation itself have so impressed men's minds that it has been possible to surround the thing revealed, blank staring inexorable Fact, with a sort of emotional halo. But it is important to notice how far the social and benevolent instinct, which in the case just supposed would have sealed the scientific man's lips, may now be colouring his doctrine. Professor Tyndall, for example, is scientifically convinced that the individual life ceases at the death of the body. But he is not a mere scientific machine, and cannot bring himself to say, 'There is a fact: make the best or the worst of it.' He finds that the fact does not make him personally unhappy, and he is irresistibly impelled to make it palatable to others. He therefore not long ago occupied a large portion of the most widely diffused scientific address of the year with an eloquent

attempt to give a positive value to what mankind will persist in regarding as pure negation, and to make people really enjoy by anticipation the absorption of themselves as a drop into the ocean, and the loss of identity in the infinite. Now if Professor Tyndall were as certain as our former imaginary discoverer that the result of his tidings would be universal grief and consternation, he would be in no hurry to proclaim them; but he not unnaturally sees nothing to justify terror and aversion in what he himself can regard unmoved. He would, however, probably have to admit that his own contentment with things as they are does not truly depend on a perpetual sense of comfort, or occasional thrills of rapture, at the notion of being finally swallowed up, but on his view of the facts of the present life; and that this view in its turn depends greatly on his special temperament and circumstances. Every person who could come to him and say, 'I have not your temperament; I am not happy now, and I am all the worse for knowing that my affections are to be snapped and myself swallowed up,' would be so far a proof that Professor Tyndall had been impelled by the benevolent instinct, supervening irrelevantly on the apprehension of scientific facts, to direct the

imaginations of his hearers to a mirage—to a vision the solacing and supporting power of which must be pronounced phantasmal unless actually verified in experience.

Science, then, cannot seriously or permanently attempt to represent contemplation of the uniformities of Nature as a daily feast, nor final extinction as a rapturous future; and the men who deal with the unalterable objective facts of man's history and environment would be free to make the worst of them, for aught that could be demanded by loyalty to the passionless mistress whom they serve. In making the best of them, the most they can say is that they find nothing in the facts or in the deductions drawn from them which has appalled their own imaginations. What common ground, then, do they find with the spiritual teachers? What claim do we see put forward for the value and dignity of life by those who feel alike compelled to reject the confident religious views and hopes alike of Christians and Positivists, and no less unreservedly to accept the conclusions of Science, while unable to derive from these last the slightest spiritual glow?—for there are many such who both implicitly and explicitly disavow pessimism, and would abstain from lifting the

proverbial finger, if the extinction of the race depended on their will. They no doubt vary in sensitiveness to the darker side of things; and perhaps the saddest of them speak the least. But they all have at their command an indefinite stock of an ingredient by which the imagination can turn the blackest tints grey—a general sense, namely, of the sweetness of human ties and affections, and a belief in substantial satisfaction from the realisation and performance of duty. Their teaching, if sometimes vague in its terminology, is clearly in the positive current; and though their voice may not sound exultant, it is free from accents of despair.

In this fundamental point, then, the assertion or implication of some distinct value and dignity in life, we find something common to all our practical philosophers. Their philosophy, being based on very different grounds, is naturally negative and destructive when they are attacking each other's grounds; but they none of them rob the world of anything without offering an equivalent which seems to themselves to be of positive worth. There is, however, another line open to those who engage in the controversy—namely, the purely negative one; the taking away without giving anything in

return: the pointing out of alarming results sure to follow from the adoption of certain views, and from the walking in certain logical paths, but without any attempt to indicate an escape from them. This line, like the others, avoids a distinct avowal of pessimism, which at present, as we saw, has no place open to it in general literature: but so far as it wins acceptance, it may be none the less disastrous. For it can clearly add no force to any one of the rival positive views. except in such minds as are content to waive the intellectual basis of their beliefs, and to estimate the convincingness of a creed by disagreeable results connected with its opposite. Destructive criticism of this kind stands on very different ground from that which has attacked, and to many minds destroyed, the dogmas and claims of the various religious systems; for that criticism has been conducted on the view that the dogmas and claims are cramping to the best activity, and thus hurtful to the happiness, of mankind. But it seems unjustifiable for any who do not themselves perceive at least some truth and efficacy in these systems to preach to those who are also unable to accept them of the total absence of any workable alternative. To do this is in fact to do

covertly what I have asserted never to be done openly—to preach a gospel of suicide.

This serious charge seems to me to lie against what has probably been the most widely read of recent contributions to the Controversy of Life. In raising the question, Is Life worth Living? Mr. Mallock's professed object was to take no side, but to awaken others to a sense of the alarming issues of certain opinions; in other words, to awaken those holders of the opinions who respected their own reason to the certainty of a miserable and inevitable doom for men. I do not know how far in some later writings-e.g. in a paper on 'The Future of Faith,' in the Contemporary Review-Mr. Mallock may have intended to redeem himself, by indicating that he knows of a haven where he believes that refuge can and will be found. But his earlier utterances have been read by many who will never consider them in connection with this other; and as they are sufficiently typical of much that one hears around one to afford convenient ground for discussing the points in question. I propose to touch on a few of these, reserving my most fundamental difference to the last.

Two preliminary considerations may be rapidly

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glanced at. Mr. Mallock's object is to show first that Morality, secondly that Happiness, depends on Religion-which he defines as belief in a personal God, and in personal immortality—and would gradually disappear if these dogmas ceased to be believed. He considers that people are at present tolerant on the questions which divide the intellectual world, through not perceiving that this is truly the issue. But now follows a most puzzling statement. When the world, he says, once realises this issue—that is, realises the joylessness and dulness of the 'dereligionised' (more truly dedogmatised) life which it is the object of his papers to depict—it may reverse in a moment all its former judgments. 'It will argue back from the practical conclusions to the theoretical premisses; and if it rejects the latter as repulsive, it will wisely and inevitably condemn the former as false.' This prophecy seems a little bold; as it is in the certainty, not the pleasantness, of facts that premisses are apt to get verified, and many things not commonly accounted agreeable—death, for example—are recognised as uncomfortably certain. But any one who accepts the prophecy must surely perceive that it constitutes a veritable safety-valve; and it was unnecessary to write a book to prove

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what a dismal fate awaits our race, if the meresight of that fate from near at hand, without even a taste of its reality, will insure a rapid and complete escape from it by reinstating the discarded dogmas.

Once more, even looking at the future with Mr. Mallock's eyes, I do not know why it is bound to be specially interesting or distressing to us. Granting the unpleasantness of the transition-stage, we may at least spare ourselves concern in the remoter fortunes of a set of beings in no true sense akin to us; for if mere ancestry constituted a kinship with claims on our sympathetic interest, we might equally well be deploring the savagery of our progenitors in the past. Some of us think that we are descended from apes, yet the connection does not specially afflict us. Why, then, should a prospective picture of distant relatives from whom moral characteristics have disappeared appal our minds more than the future existence of lions and tigers? The blow to the imagination in the implied negations, in the forced abandonment of hopes that we may have cherished, I can understand. But on the positive side, Mr. Mallock seems to ground his appeal to our emotions on an argument that proves too much; for with the death of conscience—and

he actually appears to refer the vitality of this pervading principle of social evolution wholly to the supernatural beliefs which he conceives to be decaying—the very meaning of spiritual kinship, with its implied sympathies, would vanish.

To pass on, however, to the main current of his argument: he begins by noticing the present attitude of the atheistic teachers, their devotion to the cause of morality, their belief in the solemn importance of human life, and their agreement with religious teachers that, 'lived in one way, it is a hateful failure; lived in another, it is a beautiful success.' He argues that they are committed by this premiss to the duty of showing that this transitory life, which saints and sages have pronounced to be wholly vanity, contains on its own account something of supreme value; and this something, he assumes, must be an 'end of action,' such an end being postulated by all moral systems, and must be an attainable and describable happiness beside which everything else will appear insignificant. He then finds various difficulties in the facts that the happiness actually offered is faultily indefinite, and that morality, being merely a code of restraining orders, is incapable of being presented in such a

way as certainly to attract the hostile and indifferent.

Now if any atheistic teachers have really offered to their disciples 'supreme happiness' in this life through the exercise of virtue, we may agree with Mr. Mallock that they have done a rash thing. But we must observe that all that they are bound to do is to point out some positive value attaching to life; something which raises it above zero, not necessarily to boiling-point. I am not myself aware of their having ever advanced the claim imputed to them by Mr. Mallock, that they can offer anything in this life as enjoyable as the future life is expected to be by believers. But what then? They did not make the Universe. Thev offer something to those who otherwise might have nothing. We saw that people who have only stones to give ought in charity to keep them to themselves; but what is not stones need not necessarily be plum-cake. And in Mr. Mallock's argument we surely come across an old friend in the shape of an ambiguity in the word 'end.' Virtue is an end, not in the sense in which heaven is an end, but in the sense in which health is an end. It would be difficult to overestimate the degree in which health conduces to happiness; and

no one would think that he had successfully impugned its influence in that direction by showing that it cannot be brought to a focus at any particular instant, that many of its rules are restrictive, and that many people neglect it in spite of having its advantages pointed out to them. The metaphor of 'paths' is a dangerous one in this connection, as it far more naturally suggests an object to be attained at the end of a journey than sights and sounds to be enjoyed by the way. Yet the sights and sounds are quite definite; and in application to virtue and its effects, the word 'indefinite' can only fairly mean, not that they have an ambiguous nature, but that their realisation has not assignable moments and limits. They are indefinite as the air is indefinite, not from having obscure and undetermined qualities, but from being diffused in their action through all our days and hours.

Such statements as that 'without religion there can be no morality,' and 'no power to enable us to overcome temptation,' have two possible meanings. They might mean that no individual can be moral without religion; or they might mean that without the considerations which religion supplies morality could never hope to become dominant in the world at large. Now Mr. Mallock, having

defined religion by the acceptance of two dogmas, cannot of course assert that there are no individuals living at the present moment who, rejecting the dogmas, are moral and do overcome temptation. and would even profess in a general way to be happy. This, however, according to him, gives no assurance for the future. Such cases, he maintains, are only possible through the survival in the system of life up to the present time of the fine flavours and supernatural tints of religion. With the disappearance of these the substance will die out of virtue, the zest out of vice, and in the prevailing dulness no teacher will any longer have a legitimate aim or standpoint. This view is at any rate intelligible if it simply means that the atheistic moralist at present finds life tolerable because he experiences sympathy and reciprocity in the practice of virtue; but that most of the people round him sympathise and reciprocate as a result of their supernatural beliefs, and will cease to sympathise and reciprocate if they lose those beliefs; and that his own morality and happiness will disappear in consequence. Of the fate of his happiness in such a case there seems no doubt; for the happiness of a virtuous person cannot but depend to a great extent on a congenial moral atmosphere, on the

views and sentiments existing around him and beyond his own control—so that a general decay of virtue would leave him painfully isolated. In considering whether his morality would suffer equally, I must remark that I am desirous to keep at present to Mr. Mallock's own ground and to accept his basis of conduct, which is au fond a selfregarding one. I am ignoring, therefore, the possibility of a second and purely altruistic principle, equally acknowledged as ultimate, which I hold to be the basis of rational Utilitarianism. Is, then, a morality based exclusively on enlightened selfinterest doomed to be swept away in any general ebb of virtuous and sympathetic impulses? Only, surely, if the ebb were strong and universal enough to drag down the very fabric of society-which is neither the state of things that Mr. Mallock is contemplating, nor, as I have said, one bound to cause us any particular concern. Any lesser ebb, when it had reached its lowest point; must necessarily be succeeded by a flow. Short of a lapse into savagery, the mere reciprocity of mechanical services would always be giving opportunity for the germ of social sentiment to fructify anew; and society being preserved from dissolution only by a certain amount of repression of egoistic instincts,

any individuals who realised more clearly than those around them the advantages of subordinating shortsighted selfishness to enlightened self-interest would have a locus standi, and even a mission. For implicitly society would be granting their principle. Any one, in fact, who took to heart Artemus Ward's maxim 'Scratch my back, and I will scratch your back,' would have his feet planted safe above the ebb with which we are threatened, and could reach out a hand to others. But these are dark sayings to Mr. Mallock. 'What,' he asks, 'is this precious something, this peculiar kind of happiness, that we ought to live for? What is it that we gain by virtue and seriousness, and lose by vice and frivolity? It must be something, and it must be something definite.' Of course it is something definite, though not the burst of ecstatic rapture which he chooses to assume, for the purposes of his argument, that it is bound to be. Surely nothing but the figment which Mr. Mallock forces on his opponents, that a very essential ingredient of human happiness is a thing certain, even alone and unaided. to ensure the ideal maximum of it, could have blinded him to the obvious truth that the instincts which are satisfied in a member of a society by the exercise of social virtues are found to be those

the neglect of which most severely punishes itself.

The doctrine of the dependence of morality on religion has, however, much greater plausibility, if it means that the professors of morality may find the attractiveness with which they can invest it an insufficient bait to allure the eyes and imaginations of others. The analogy of health is here very pertinent. The same reservations have to be made in advocating the laws of moral as of physical health; for both entail the avoidance of certain indulgences, for the sake of a balance of advantage. Nobody, however, can suppose morality to have advanced to its present stage through advocacy. It has won its way on its own merits, moulding and purifying religious conceptions even where seeming most to depend on them; and the manner of the development of society, on a basis of mutual convenience and mutual obligations, has been so widely recognised that Mr. Mallock must excuse others for having thought its recognition might be taken for granted.

Mr. Mallock endeavours to support his view of the shortcomings of atheistic morality by citing passages from two authors whom he selects as exponents of it. The quotation of George Eliot's

verses. 'O may I join the choir invisible!' seems singularly out of place in his argument. She is expressing a purely personal aspiration, as genuine and appropriate in her as it would be exaggerated and absurd in one of lesser mental and spiritual stature. The doctrine that by altruistic aims and conduct it is possible to extract even from effort and suffering a joy which at certain times is allsufficing, and at all times strengthening and sustaining, is indeed implied. But 'to make undying music in the world,' and to be to distant generations 'a cup of strength in some great agony,' is obviously an aspiration for an individual here and there, not for the mass of mankind. It would be as relevant gravely to accuse the poet who sighs 'O for a lodge in some vast wilderness!' of not presenting a definite attainable object to mankind, on the ground that vast wildernesses are limited in number, and a plurality of lodges in any one of them would spoil its character as a wilderness.

Nor does the passage quoted from Mill, in which he describes the failure at one time of aspirations and labours for others to yield him personal contentment, do more than exemplify the fact—which no one surely would dispute—that the rewards of altruism are not certain and unfailing at

all seasons. Mill, however, points to considerations in the light of which many have found genuine relief from the difficulty, but which Mr. Mallock describes as a mere wriggling out of it; to wit, that personal happiness is often best attained by not making it the direct end; that it is more likely to come if we fix our minds on some other object—the happiness of others, or the improvement of mankind, or some art or pursuit followed as an ideal end in itself. Mr. Mallock objects that the arts and pursuits are only morally justifiable as promoting happiness; and that both here, and in the recommendation to work directly for the happiness of others rather than our own, the term happiness is still left vague and undefined. But again the argument is vitiated by the assumption that happiness can be treated in the lump, like a legacy of ten thousand pounds. Each normal member of a society derives fragments of his wellbeing from the pursuits and activities of scores of others; and he himself contributes, or should contribute, by his pursuits and activities a fragment to the well-being of at any rate a certain number of others-half-a-dozen or a million as the case may be. And for the better performance of each part in the distribution of employment, it is fortunate

that the constitution of men's faculties enables an enormous variety of kinds of useful and artistic work to present themselves readily as ideal ends, though at any moment the mind can transcend this view, and justify them on the ground of their adding to the world's stock of happiness. 'What sort of happiness shall I procure for others? and what sort of happiness will others procure for me?' asks Mr. Mallock. Why, whatever you can do best and they can do best. And over and above the satisfaction in the performance of daily work. the course of your and their pursuits and activities may be indefinitely enriched and irradiated by the daily facts of comradeship; by the living in each other's lives and interests; by the recognition, in short, and cultivation of the social instincts which are as real an element in civilised human nature as they are an invaluable positive factor in human welfare.

From this point of view, the idea that the happiness or contentment of agnostics in the present day depends generally on the survival of an unacknowledged flavour of supernatural beliefs, and so affords no criterion for the future, must seem a pure assumption. For if a man can point to a substantive value in this life, based on facts of his

own experience, it is absurd to say that he would find no value if everybody else's experience became the same: a number of positives cannot make a negative. We may even retort on Mr. Mallock that, in pointing his argument with the fact that people to whom the dogmas have been a fixed and inseparable mental factor have pronounced strong opinions on the barrenness of this life, he has really made them do the very thing which he says the unbelievers of the present day have no right to do-pronounce, namely, on a state of things which in their day could not possibly be tested by evidence. The 'eager monk' and the 'sated monarch' are perhaps hardly the people to whom we should look for the soundest view, as they may be supposed to have scarcely given unselfish activity a fair chance; but the 'saints and sages' who have decried the things of this life as wholly contemptible have simply done what we are all doing every day-failed to dissociate in imagination things which have never been dissociated in experience. In their imaginations the elimination of supernatural beliefs necessarily carried with it the elimination of the virtuous element in life; and with this elimination the truth of their view can hardly be questioned.

The same retort applies with still greater force to Mr. Mallock's remarks on the 'supernatural moral judgment' which he represents as crossing the natural lines of happiness, and of which he seeks to adduce evidence from the works of some of the great dramatic poets. Here the 'supernatural' element in the judgment depends on only one of Mr. Mallock's two cardinal dogmas, and on that only in a very modified form—the sense of duty, namely, to a higher Power (certainly not conceived in the case of Antigone as a personal God). The hope of personal happiness in another life does not come in; for contemplation of a future supernatural reward, though it has doubtless been a solace to 'saints and sages,' has not been dwelt on in literature as a motive of heroes. This being admitted, Mr. Mallock seems committed to the following dilemma. Either the courses of action which Antigone and Isabella adopted were considered by the poets as conducive, and those which Macbeth and Margaret adopted as prejudicial, to human welfare; or they were not. If they were not, the desirability in any of the cases of one line of conduct, and the undesirability of the other, can only depend on the incomprehensible caprice of a superior power, and are excluded from the sphere

of morality by Mr. Mallock's own carefully elaborated definition of a moral act-to wit, that it is directed to a good acknowledged as good on its own merits. If, on the other hand, the courses were such as the poets and we ourselves should wish to see respectively adopted and rejected (in spite of individual suffering) with a view to the maximum of human welfare—if we perceive in the course we call right the subordination of the lesser good to the greater, and in the course we call wrong the subordination of the greater good to the less-then all ground vanishes for assuming the moral judgment in such cases to be essentially supernatural. Mr. Mallock says he calls it supernatural 'because no interrogation of nature can either support or verify it.' So far as interrogation of nature, in the sense of examination of ascertained facts in the natural development of human life and history, does not verify it, I should prefer to call it not supernatural but false. What is true is that a member of a developed society, the heir of innumerable social instincts, is often and instinctively led to avoid a moral wrench and to sacrifice egoistic to altruistic impulses, convinced by the mass of his experience that men are gainers by so doing. When this very natural fact is

explained by a 'supernatural blessing' attaching to the altruistic course, and a 'supernatural curse' to the egoistic, and when by this expedient religion, in the shape of the 'supernatural moral judgment,' has been associated with all social emotions and pleasures, there is, of course, no difficulty in painting life without it as dull and valueless.

Mr. Mallock's own positive plea for the 'supernatural moral judgment' adds nothing to his main thesis, since it merely assumes in another way that no dissociation is possible between two things once associated. He takes two characteristics from the supernatural stage of the moral judgment-namely. that it is absolute and imperious, applying the same standard to all men; and that it asserts between right and wrong a difference not of degree but of kind, as in asserting the value of purity to be incalculable; and assuming that both these characteristics are of invariable validity, he argues that the moral judgment must be essentially supernatural. A Utilitarian of course escapes the conclusion by rejecting both assumptions—or rather by rejecting the first and the false application of the second. For truly the difference between right and wrong is to every moral agent at every turn of his life a difference not of degree but of kind, inasmuch

as his choice is so much to the good or so much to the bad in relation to human welfare, and directly promotes or hinders his own development as a social being. But some particular action may of course fall into opposite categories, according to differences in the epoch and the environment and in the individual's own nature.

Nor must we omit to note how disastrously a view which ignores the development of morality in connection with the development and welfare of society reacts on the subjects of Mr. Mallock's two dogmas-on our view of the Creator, and of the future life. Virtue having been made to consist in mere obedience to external rules, its supernatural inventor, who has no external rules to obey, is necessarily non-virtuous. And even if he were credited with a certain benevolence of nature, for giving the creatures whom he has made a chance of happiness through conformity to his rules, that spiritual kinship with him which his human children have delighted to claim would be a figment; for benevolence, on Mr. Mallock's purely self-regarding principles, is not a part of human nature at all. Again, as regards a future life, the total inadequacy of virtue to attract followers must have a damaging effect on any importations brought VOL. I. ĸ

in to supplement it 'from the supernatural order.' They are expressly brought in to attract—that is, to do what virtue has so signally failed to do. They must therefore be totally different from virtue in kind, and benevolent and sympathetic activity can have no place among them. Such a prospect will hardly inflame the imaginations of those to whom the face of virtue is still fair, in spite of their being told that they have no right to gaze upon it.

So far we have been considering life almost entirely in the gross. When, however, I turn to individual lives, I am brought, by a totally different path from Mr. Mallock's, to conclusions in some respects resembling his. I conceive as a true reality that which Mr. Mallock treats as a dream, the possibility of a widely spread happiness, of which morality is the main factor, as well as the safeguard—a possibility to be more and more realised in proportion as the social and humane instincts develop; so that, given adequate physical conditions, including a good chance for all of enjoving health and a fair share of the beauties of nature and art (a state of things certainly far enough out of sight), the life of man might on a general view be pronounced distinctly good. But there are and will be exceptions; and my inability to disregard these affects my whole view of the controversy. The modus vivendi established between the egoistic and altruistic principles is not secure against violent interruption; and however far social improvement may advance, exceptional circumstances of physical and mental suffering must inevitably occur, entailing on individuals who feel their opportunities and affections bounded by this life a hopeless existence permanently below zero. It may not be possible to be habitually happy without being virtuous; but it is terribly possible to be habitually virtuous without being happy. Moreover, where the cause of the suffering is the sundering of affections and sympathies, the pain is keen in proportion to the strength of those very elements in life which, in view of the general sum of happiness, have proved themselves the best worth emphasising and encouraging; so that a paralogism is presented whereby the 'individual's life in a society seems self-stultified. And such cases of permanent unhappiness are ultimate facts on the wrong side. A view which may truly assert the positive value of life in the aggregate, must still be content to admit the anomalies of its apportionment; and even a hardy Positivist would

possibly acknowledge that he himself might be placed among the exceptions by a combination of cancer with the loss of all his friends. While I am I, my altruistic instincts can only be a part of me, and cannot extort from me contentment that life on the average is good, if mine is bad. Nor, even if mine be not bad, is my moral reason satisfied by contemplation of the happy average, as long as I am aware of the existence of individual lives below zero; since I would not, if I could, create a million happy lives at the expense of one hopelessly unhappy one. We saw in a previous Essay that the million happy people would be bound, each in turn, to submit to extinction, if by that means the one unhappy life could be extinguished. And though its existence might be supposed to be concealed from them, I cannot think away myself, the supposed creator, with my knowledge that each of them, if he knew the price of his own happiness, would be morally bound to confront his own existence with the unhappy one and pronounce it a wrong; and that I therefore, who can so confront them, have committed the wrong. This view might be defended, I believe, even by a consistent Utilitarian, on the ground that there are extremes at which pain ceases to be a thing commensurable with

pleasure. But if not, then the consistency of the Utilitarian faith has to give way to a still deeper craving for Justice.<sup>1</sup>

These considerations form to me, I find, an ineradicable flaw in the testimony to the value of life. That is, taking the facts as they are, if for the worst and most permanent suffering there were no possible assuagement of hope, if I found in myself and all around me an absolute conviction that the individual existence ceased with the death of the body, and that the present iniquitous distribution of good and evil was therefore final, I should in consistency desire the immediate extinction of the race. And this brings me to my final difference with Mr. Mallock.

I have spoken above of the bewildering aspect which the Controversy of Life must bear to many of those who watch it; how they may agree with a point here and a view there, may see true conclusions (as they believe) drawn from false premisses, and true premisses leading to false conclusions, till amid the confusion they may well doubt

<sup>&</sup>lt;sup>1</sup> I have pointed out in the passage referred to how our natural feeling of the essential incommensurability of pain on the one hand with pleasure on the other is illustrated in the fact that we rejoice when a suffering person obtains unconsciousness in sleep, while it never occurs to us to pity the temporary unconsciousness of a happy person.

whom to call friend and whom foe. Now to those who are thus doubtfully watching, it may seem a boon that some skilled person should come and expound the scene. He might show how one party, with 'Truth' on their banners, are making their way to vantage-grounds the possession of which would yield an outlook so barren and hideous that they themselves would shrink back appalled; and how another, whose motto is 'the Eternal,' are only leading the course of the mêlée into devious channels by using the watchwords of their foes. with care the main objects and tendencies might be disentangled, and might suggest the ultimate coalescence of the multitude of parties into a few, one or other of which must gain a victory of incalculable import, for weal or woe, to the destinies of mankind. Such a simplification, I say, if it be at all possible, may well seem desirable. But if it is to do good instead of harm, it must be based on thorough appreciation of the forces engaged; so as to eliminate false claims and unreal assumptions, but not to leave out of account, or merge in other lines of opinion, views which can be put in an irreducible form, and have therefore their own distinct locus standi.

This mistake seems to me to have been made

by Mr. Mallock in the very beginning and foundation of his argument. He divides schools of thought into two grand classes, according as they dogmatically affirm or deny the existence of a personal God and the personal immortality of man, The affirmation, as we have seen, he calls religion; the denial, atheism. He goes on to admit that between these poles of certainty there are all gradations of doubt, but disregards these on the ground that he is only dealing with the active results produced by mental conditions, and that so far as certainty either way can direct or stimulate action, doubt in a like degree must paralyse and arrest it. 'The philosophy of complete doubt,' he continues, stands self-condemned and only exists as a disease, not to be propagated by any one in his senses: while if the doubt be not complete, if it be not perfectly balanced in the centre, it must be always tending to one pole or the other, and its right name would be incomplete religion or incomplete atheism, neither of which stages is final; and, the incompleteness being in each case an imperfection, it must be got rid of before we can do any iustice to either side.'

The assumption here is surely obvious. The 'two poles' are treated as both *positive*; denial of

the dogmas is treated as though it were a positive stimulus and support to action equally with the affirmation of them. Now not one of those who think the dogmas false or absurd ever treated the mere rejection of them as something which of itself supplies a positive guide and aim to life. Certainty that way has no possible power in itself 'to direct and stimulate action.' To make the alternative just, the certainty of one positive stimulus would have to be set against the certainty of another, not the certainty that a particular incentive does exist against the certainty that it does not. But if we cannot get incentives which are adequate and certain, the next best thing is to get incentives which are adequate but uncertain. And if such new incentives as the deniers of the dogmas can offer seem, in any one's imagination or experience, inadequate, however certain, for such an one the slightest diminution in certainty that the old incentives are unreal is necessarily an approach to the positive pole, and to that extent an escape from paralysis. A digger is surely more likely to work with interest and enjoyment if he learns that there is a chance of finding gold, and that his work in that case is conducing to the welfare of himself and those dear to him, than if

he is convinced that there is no gold to be found, and no chance of any further result from his labour than the exercise, often painful, of his muscles, with wages already proved insufficient for his necessities.

We must avoid confusion between the effect on us of doubts as to probability, in respect of the existence or occurrence of something beyond our own control, and the effect of doubts as to action in the presence of two practicable alternatives. In the latter case the alternatives are both positive, in the sense that positive benefits are hypothetically suggested by the adoption of either; and here it is certainly possible for doubt to be 'balanced in the centre' so truly that we do nothing. In the former case one of the alternatives is positive and the other negative, the positive one being admittedly good if believable; and here the certain acceptance of the negative hypothesis puts us in the most paralysing of all conceivable positions, unless we have some other positive certainty to fall back upon. A traveller who, having been puzzled by arriving at the fork of two roads, could not make up his mind to advance steadily along either of them, but stood still or wasted his strength in running to and fro across the fields be-

tween them, might be described as paralysed by doubt; but not so the traveller who, knowing one of the roads to have no inn on it, walked by preference along the other, in the hope though not the certainty of finding one; for in his mind the very doubt would imply a positive chance. Again, the assertion that the doubt, if not perfectly balanced, must always be tending to one pole or the other, seems to rest on the same misconception. If the doubt is what to do, a preponderance of advantage on either side rapidly decides the question, and we do not so much tend to one pole as go there; but if the doubt is what to believe, the scales of probability may rest for an indefinite time in any position, pending the discovery of fresh evidence.

Here, then, is a case where simplification has proved delusive. We are told that only two parties are contending; but a tertium quid, a definite position distinct from all other positions, has been overlooked—that of those to whom their own lives are painful and inexplicable enigmas except on certain hypotheses, which seem possible but not certain, and the evidence for or against which, from the nature of the case, may never in this life become stronger or clearer. To these the conver-

sion of their doubt into a negative certainty would clearly be the most disastrous of all contingencies. Unless, then, it can be shown that the nature of the human mind drives these persons one after another to positive or negative certitude, their position as doubters must be recognised as a substantive one; and an attempt to deal with the 'active results' of various conditions of mind cannot fairly ignore a condition which is compatible with the most strenuous activity, and the positive value of which may be estimated in the number of hearts saved by it from despair.<sup>1</sup>

A distinction, however, must be drawn between the two dogmas in question. The ideas of a personal God and of personal immortality, though commonly associated both by believers and unbelievers, do not stand on the same footing. And this is too crudely ignored in the atheistic view (as stated by Mr. Mallock) that the notion of God is unnecessary and that of a future life ridiculous. Such a view may result from certain materialistic assumptions, but certainly not from the individual's

Later on, Mr. Mallock himself, in his defence of the higher pleasures, argues that if we believed in nothing that could be doubted we should believe only the immediate testimony of our five senses. Though disputing the fact, I cannot but welcome the inconsistency.

interrogation of his own conceptions. Let us glance at each of the ideas in turn.

It cannot be denied that to those who have got beyond anthropological notions, belief in a 'personal God' implies an act of faith in which the mental faculties, logical and imaginative alike, are quite at sea. Not that such terms as 'evolution' or 'a stream of tendency' or 'a not-ourselves that makes for righteousness,' have any superiority in respect of any positive light they cast on the Universe; for though they serve to generalise facts and phenomena, they cannot transcend and explain themselves. But they do not on the face of them claim more than to symbolise facts; whereas 'personal God' asserts in the midst of the unknown an element of the known, a 'person' being to us quite a distinct and individual notion. And when we try mentally to swell this notion so as to embrace what is needed for its new application, its characteristics fall away, and we are left with an empty word. Though in certain circumstances hd attitudes of mind we may find ourselves comselled to feel our relation to some higher intelligence as a relation between two persons, any intellectual effort to substantiate such a relation will only obscure it; and there is a reasonable

objection to using a term the reality of which seems to vary with our own subjective states. Another serious objection to the term is the common association with it of the ideas of creation and omnipotence, with all the accompanying tangle of contradictions in relation to the existence of vice and pain. The association is doubtless not necessary; but it is what has given the notion of the personality its wide and permanent popularity. Though it is, of course, with God as an omnipotent creator, not with God as a person, that the moral contradictions are connected, men will swallow these for the sake of sighting firm ground (as they think) in their flounderings among the origins of things; while the alternative of a personal but not omnipotent God, though avoiding moral contradictions, does not relieve their straining backward vision, or appeal to their imaginations. The matter may be looked at in this light: if we are content not to try to transcend the conceptions of evolution, and, without explaining, merely assert the gradual development of higher forms of physical and spiritual life, then imperfection and crass  $\sqrt[n]{n}$  find a natural place in the scheme, and we are not in any way bound to account for them. Now, putting aside other objections to the personification of this tendency, we find nothing essentially unreasonable in the substitution of a personal God with limited power—that is, constrained to evolve perfection gradually from independent and somewhat intractable elements.\(^1\) But such an idea, being only parallel point for point with that for which it is substituted, and not getting farther back, presents no superiority in the way of explanation, and so is, logically at least, unnecessary. It leaves us still, as before, two things unaccounted

In the Future of Faith, Mr. Mallock, in representing the argument against a personal God drawn by unbelievers from the existence of evil, makes them assume that he is omnipotent or nothing. since no one would care 'to be the prophet of a bad or feeble deity.' Is, then, not being omnipotent necessarily the same thing as being feeble? If the facts of development and the progress of good be absolutely denied, then doubtless the controlling agency, whether conceived as personal or impersonal, may be called bad and feeble: but if evolution has been progress, so that the tendency in things when conceived as impersonal could not be fairly described as bad. neither could a personal power when substituted for it. And we find a similar misconception in Mr. Mallock's own retort to the unbelievers, that the undisputed co-existence of good and evil presents a contradiction as violent and insoluble as the co-existence of om nipotent benevolence and evil, and presents 'the sight of supreme strength being thwarted by what is not supreme strength—the eternal in the toils of the transitory.' This statement absolutely ignores the hypothesis of development. Whether or not good is supreme' in the sense that finally evil will vanish, we need not inquire: but in so far as good gradually supplants evil, in so far as life gradually rises to higher forms, is the change not good? And what contradiction is involved in its not fulfilling itself in a moment?

for, neither of which accounts for the other—we simply have the existence of the Universe and the existence of the Universe and the development of the Universe. But it is precisely as an *explanation* that a personal God is commonly postulated; and this end is thought to be attained when he is put behind the Universe and made to create it with all its potentialities. To many this seems to simplify the problem by reducing the things unaccounted for to *one*, namely, the existence of God; but as long as they assert his goodness, they can never escape the time-honoured crux, that, while words have a meaning, the being who created the Universe must be responsible for its contents.

But if now we turn to the notion of personal continuance after death, we are met by none of these moral and metaphysical difficulties. The notion is in itself perfectly imaginable. We have never once during our lives been conscious of the material movements inside our skulls which accompany thought; and it is as easy to picture the continuance of our mental operations a hundred years hence as to transport ourselves in imagination to some familiar scene, in doing which we

forget all about our bodies and brains. Indeed, the difficulty is the other way; it is to realise the existence of an association between two things our psychical life and its cerebral basis-which never have been and never can be simultaneously present in our consciousness. However essential we may suppose the association to be, we can easily picture the positive evidence which, conveyed in the ordinary way to our intelligence through our senses, would convince us of the possibility of thought and volition apart from brain; and our power of doing this is quite irrespective of any assurance we may feel that such evidence will never present itself. The point is that the notion is clear: the act of imagination by which I picture future mental experience is no more hindered or obscured by considerations about brain-substance, than the act of imagination by which, sitting in London, I enjoy the details of a view on the Lago Maggiore is hindered or obscured by the physical difficulties of instantly getting there. And where a notion is clear, the external testimony which would prove the imagined thing to exist is representable to the mind; whereas in trying to represent to my mind what conclusive external testimony to a personal God would be like, I find myself

necessarily as lost as in trying to grasp intellectually some tangible meaning in the term.

This point seems fatally obscured by calling consciousness 'a function of the organism,' as was done by Mr. Huxley in a recent 'symposium' in the Nintecenth Century. All he meant was that thought is in correlation with molecular facts; but the word function seems to imply that the relation is parallel to that, e.g. which respiration bears to the lungs. The difference between objective and subjective phenomena in relation to the physical organs is obvious. In the one case the idea of respiration without respiratory organs is unthinkable and absurd: in the other case the association of thought and brain is something which we readily can, and commonly do, ignore in imagination, though evidence may never have shown it as annulled in reality. In the former case the two notions present a logical connection of the simplest possible kind, one being absolutely involved in the other: between the two notions in the latter case we have not the slightest right to assume any such connection, or any relation of cause and effect. In the latter case, therefore, evidence that the association is essential, that the one phenomenon is impossible apart from the other, must be wholly

unattainable. The most that can be said is that in our experience the two things have always gone together. But the effect on us of negative evidence of this kind clearly depends on whether or not, on the hypothesis that the one phenomenon could exist apart from the other, means would be open to it of making its existence known to us. Supposing the presumption to be that, on the hypothesis of its separate existence, it would still naturally be in a condition to come under our cognisance, the evidence against its separate existence, if it does not so come, is strong. But in the case before us nothing could give us reason to expect that personal consciousness, supposing it to exist apart from sensible material structure, would be able to afford sensible evidence of its presence -nothing, that is, except its actually doing so. If material phenomena implying the existence of disembodied thought and volition actually came into our experience, then the facts would have to be admitted, and when reduced to general laws of uniformity would appear neither more nor less inexplicable and ultimate than the known relations of thought and volition to physical facts. But if no such evidence were ever produced, still the notion of thought and volition existing outside us. without the power of affecting our sensibilities, would be a perfectly natural one to us; for our notion of our own consciousness does not in the least depend for its clearness on any imagined power of rendering its existence evident to others.<sup>1</sup>

Such views, even when admitted, are sometimes pronounced wholly unpractical and uninteresting. But if they, or even a dimly conceived instinct of them, form a natural and prominent factor in most of the minds which at all consider the questions involved, they must continue to have a very important bearing on human life. My contention is that this is the case: and that it is best to recognise a definite psychological state, resulting from the conditions that here a keenly felt desire is also one the realisation of which the mind pictures with perfect clearness, and with no more difficulty than it incurs in the commonest hourly acts of imagination; but the actual frustration of which it cannot, from the very nature of the case, represent to itself as part of its own conscious experience. It is in this way that the notion of personal continuance after

¹ This has been denied; see the Note at the end of the concluding Essay in this volume. But even if it be the case that consciousness implies an organism, it of course does not follow that the organism need be of a sort perceptible to our present senses.

death presents itself to many minds, quite independently of revealed religion; and the element of possibility and reality refuses to be thought out of it. It exists as a doubt, but a doubt presenting itself to the majority in the positive form—not as 'probably no' but as 'possibly yes.'

And if the hope exists now, it is hard to see why it should cease to exist in the future. Such a cessation would involve either a change in the scientific evidence, or a change in men's mental constitution. Now the scientific evidence, if it changes at all, can only do so in the positive direction. What it needs for this is new facts; and the new facts which would prove the possible dissociation of thought and volition from brain are, as I have tried to show, easily presentable to the mind; while the negative evidence can never amount to more than the absence of such facts—that is, cannot be or become convincingly destructive. Nor have we any reason to expect a wide change in mental constitution and temperament. Differences in this respect will probably continue much as they are now; and people do, no doubt, differ greatly as to the effect on their imaginations of absence of positive evidence. To the majority, however, the amount of solace which the idea of a chancecan give is out of all proportion to any scientific estimation of the greatness of the chance. Suppose that after condemnation to a long term of captivity, a prisoner is told that there is one chance in ten of his release at the end of a year: the large majority of men, in such a case, would find the burden of the year immensely lightened. Nor, I believe, would the effect be diminished, but rather enhanced, if the chance were indefinite and not susceptible of a numerical statement. And as regards the question of a future life, the case is further peculiar, in that there could never be an awakening to disappointment; for if the hope represents no reality, the moment of its frustration is also the moment of the dissolution of the individual's consciousness. Anyhow, the hope is undeniably entertained in the present day by many who give their full weight to the materialistic arguments; whence we may fairly conclude that, even if it remain a doubt, a large proportion of mankind will, in the future as now, some habitually and some under stress of emotion, find in it comfort and support. Nor can persons who do not like the notion of a future life, or who think it absurd, complain if such divergence of view is treated as nothing to the point by others who find it a permanent and ineradicable element in their minds.

If it be objected that the word ineradicable begs the question, and that many equally deeplyseated notions have given way before superior enlightenment, the answer is that the advance of knowledge and morality cannot be shown to have decreased by one single iota man's innate avidity for happiness; and that if the progress of ages brings increase of happiness in this life, the avidity for its continuance may be expected to grow, since the greater are a man's treasures the harder he finds it to part with them. And even those who most firmly reject the notion may surely be well content that it is out of their power by conclusive negative testimony to shut the loophole to others: seeing that they may be safely defied to imagine any way in which the outlook through it can be detrimental to the evolution of the most ideal human life.

## A CHAPTER IN THE ETHICS OF PAIN.

THE International Medical Congress of 1881 fanned the fires of a controversy which, to do it justice, has never of late years been anywhere near the smouldering-point. The Vivisection Act of 1876, which it was hoped would be a final settlement, has been a mere incident in the fray. The one side has continued to pour in its steady small-shot of preachings and pamphlets, which the other has met from time to time by a round of heavy artillery, when some scientific anniversary or the unveiling of a discoverer's statue gave suitable vantageground: while occasional skirmishes in the general press have shown that each has a considerable hold on public opinion, and feels the duty of extending it to the utmost. It can be but seldom that a practical moral question, comprising so considerable a class of actions, is thus in debate: amid all differences of ethical and religious standpoint, two edu-

cated persons of the same society might seek far for circumstances of ordinary or professional life where they would seriously differ, or at any rate where each would be willing to advertise a serious difference, as to right and wrong. That duty to animals should form an exception in England at the present day is due to a combination of two causes. First, the very existence of any such duty is a quite modern discovery: marks of affection to animals in the past, in cases where the relation was agreeable to human beings, avail little against the evidence of average public opinion which history and literature supply. And then, side by side with this latest product of civilisation, while it is still uncertain of its ground, and rather an instinct than a principle, circumstances have chanced to arise of a nature to try it to the utmost; I mean, of course, the enormous and increasing development of scientific and medical activity which has claimed live animals as its material. A new and doubtfully formulated principle, and a new and complicated extension of the need for its application, have made their appearance together. No wonder, then, that the issues of the problem, while more or less acknowledged as moral ones, should refuse to fit with immediate certainty into any acknowledged moral scheme, and that the

powerful instincts concerned should be found hard to reconcile; no wonder either that the resulting strife should present a peculiar bitterness and misdirection of attack, and a peculiar mixture on both sides of good and bad arguments. My aim is to do something towards disentangling the issues from this unnecessary confusion. Not that I for a moment hope to make all plain: the very clearing away of untenable and inconsistent views will bring out inherent difficulties in the main question which have been much overlooked. But even this will be an advantage; since it is through regarding the question itself as an easy instead of a hard one that each side has regarded the position of the other as simply and culpably perverse.

Before approaching the main issue, we may conveniently get rid of a few surrounding arguments and assumptions whose chief result is to conceal it, and to make either case, at any rate in the rhetoric of the other, look as weak as its weakest point. Of these outposts two are of special importance—the relation of torture to killing, and the well-worn theme of sport. On the former subject, Professor Virchow made some typical remarks in his address at the International Medical Congress in the summer of 1881. Starting with the fact that killing

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is the offence most severely punished by law, (which he accounts for by the strange assumption that after all other injuries the injured party can 'once more attain a full and complete enjoyment of life,') he thence infers that killing is the extremest injury that one man can inflict on another; from this very questionable inference he deduces with much emphasis the general law that 'killing is more than torturing'; and so arrives at the desired conclusion that it is absurd to think more of the torture of animals than of the painless killing of them, and that every opponent of Vivisection is bound to be a vegetarian. Because the highest legal penalty is reserved for murderers, therefore the annulling of sensation, which in the case of an animal is what is meant by painless death, is more—i.e. is a thing to be more dreaded by or for the animal—than the maximum of intolerable sensation, which is what is meant by torture. What would be the natural idea of a cause which needs such support? Examples and arguments throng in refutation. Thus, to take an instance where the object is identical in the two cases, is the schoolboy who commits even so wanton an act as shooting a seagull for his amusement regarded in the same light as if he plucked it alive? Or, again, of persons not swayed by religious or altruistic

motives, would not many, perhaps most, prefer painless death to torture? And in the case of the animal, while torture to it and to the man mean precisely the same thing, is not every consideration which in the case of the man weighs against deathwhether the break of vividly realised ties, or the shrinking from a foreseen shock, or the dread of the unknown-conspicuous by its absence? But the particular legal argument admits of more direct reply, resting as it does on total oblivion of the difference between the man and the animal in respect of the effects of killing. These, in the case of an animal, are absolutely confined to the individual-with the gain very likely of painlessness over the death which Nature would bring, and the loss of a certain space of life which no one estimates so highly but that he would prefer the animal to forego it, if the alternative were to spend it in suffering. So that here the comparison of killing and torture is quite unencumbered; it is simply the cessation of sensations versus a hideous and avoidable addition to them. But in the case of a man, a member of a highly organised community, the effects of killing go far beyond the individual, and far beyond the intention or desire of the killer; hence the complication of a legal aspect

of the problem quite distinct from the moral one with which Virchow has confounded it. The point can scarcely require illustration. Does not every day bring before us cases in which we notice with pain the disproportion between legal and moral guilt? Do we not extend to one who has committed even murder in a fit of jealousy a sympathy which deliberate cruelty would instantly choke? Is it not notorious that the object of laws is to prevent actions harmful to society? And, to say nothing about the value to society of the lives of its members, is it not the case that while torture of human beings is a deliberate process, connected with no temptations of passion or interest, and too difficult of performance without publicity and resistance ever to affect the general security and comfort, the taking of life is an offence often led up to by the strongest temptations of passion or interest, ordinarily the act of a moment against which the victim is powerless to guard, and capable, unless checked with the utmost rigour, of becoming so frequent as seriously to affect the security and comfort of the whole community? Might not Virchow's politics have informed his science to somewhat better purpose than this?

Next, as to cruelty inflicted in sport, and in the

where; and that there is a reasonableness in beginning with a compact class, of large recent development, who are articulate, who work in private, and who take a special departure on philo-

157 treatment of animals for various purposes of luxury and convenience. This topic, if put forward by Vivisectionists as a plea of extenuation, would clearly be quite beside the mark; for the question whether their actions are right or wrong can have no relation to the actions of quite independent sets of people. Still more hopeless is the plea when used with the implication that cruelty in other pursuits may be right or defensible; as when Virchow tries to reduce the extreme Anti-vivisection case ad absurdum (a thing so easy to do that it is really irritating to see an able man completely fail in doing it) by saying that at that rate those who 'make use of torturing methods' in the training of dogs and other domestic animals 'would easily be in danger,' and calling this most desirable result 'a strange conclusion.' When put forward to show the absurdity of attacking one evil while others much more glaring are condoned, the argument has doubtless more weight. But even here the other side may fairly reply that, while recognising abuses all round, they must concentrate their attack some-

sophical and praiseworthy motives, rather than with a diffused body who make no professions, and merely go on doing in the full light of public opinion what their fathers have done before them for centuries. When, however, we leave the question as to the fittingness of the argument, and merely look at the facts alleged, the physiologists certainly seem in this country to have very much the best of it: one wishes it could be otherwise, and that, of the two, the suffering were the more prominent on the side of the events which are infinitely the less frequent. Taking the most severe of recent experiments—those made on the biliary secretion by means of fistulæ-I certainly should not hesitate to choose that amount of suffering for my last hours rather than the night-long torment of many a trapped rabbit or broken-legged bird. Nor can the preliminary operation for such experiments. even when performed (as surely it need not and should not be) without an anæsthetic, equal in pain that performed every year, as a matter of course and without a thought of anæsthetics, on thousands of lambs. As regards the greater length to which the suffering extends when a process has to be induced and watched, it must of course not be ignored in the reckoning. But, as far as the

actual wound is concerned, all evidence goes to show that, after cessation of the wounding process, an animal's pain is extremely slight; and for what remains, the wretchedness of severe illness, not only must every one recognise its difference from torture, but it is just that form of distress which may reasonably be supposed to be much mitigated in the case of animals. Superior intelligence has been represented as an aid in surmounting physical distress, and when directed to religious or other objects extraneous to the physical condition, it may, no doubt, so act; but when directed to the distress itself, as in case of severe distress it normally must be, I should say just the reverse. The sense of rebellion, the helpless beating about of the intellect. the counting of time and vivid sense that the next moment will be like the last, the demand ever urgent and ever baffled to find a meaning for such experience, more than all the sense of wrong that comes from comparison, the consciousness of self as an exception, of clueless isolation, of being marked off from normal sentient life by an intolerable something which none can share—all this points to the close relation of suffering to intelligence; and the consequent difference between man and brute would presumably be at its maximum in

cases of protracted suffering below the agony-point where the intellect is too blinded to be active.

But if comparisons of pains are hard to test, not so another favourite argument in which the respective mental attitudes of the sportsman and physiologist towards the sufferings they cause are compared, much to the disadvantage of the latter. Thus Mr. H. N. Oxenham, in a widely circulated pamphlet, explains that in hunting 'no part of the enjoyment is derived from the sufferings of the victim,' whereas 'the whole interest and excitement of a physiological experiment on a living animal, both to operators and spectators, is necessarily dependent on closely watching its contortions on the rack.' Now in giving this an absolute contradiction I would not be misunderstood. Sins have been committed in the name of science incomparably more atrocious than any committed in the name of sport, whether we regard the degree of torture inflicted, the absence of excuse in the way of ignorance, custom, or result, or the cold-blooded callousness which has been able to remain for long hours face to face with its victim. But as regards the actual feeling of the operator towards the suffering, there is no evidence that even the most hardened experts have gone beyond the point which

is practically universal with sportsmen—the point of complete indifference. Even Magendie, in his most inexcusable demonstrations, did not operate to amuse himself with contortions, but to teach his subject and gratify his vanity. The interest of 'contortions' is, indeed, a singularly unfortunate expression, contortions being precisely that which operators have been most anxious to avoid, and of which their avoidance by means of curari has been most loudly condemned. apart from this, the distinction between desire to arrive at a fact and enjoyment of a painful spectacle which may accompany the arrival, is surely palpable, and can Mr. Oxenham really pretend to disbelieve in the very existence of the former, that he asserts the whole interest to lie in the latter? Such random hitting naturally weakens the force of his blows on what is, happily, a dead horse in this country—the use of painful operations in the way of demonstration to classes. The late Professor Rolleston spoke, I think, too sweepingly, though not too candidly, of a 'sleeping devil' in every heart, to which such spectacles appeal. What he considers the rule is, I should say, among us the rare exception; and it is at any rate noteworthy in the case of surgical operations, presenting

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(even though under anæsthetics) the exact spectacle whose effect 'on the emotiono-motor nature in us' he describes, how soon and how completely interest of any morbid sort, such as is occasionally displayed by curious outsiders, vanishes under the influence of habit and attention. Still, a certain sort of fascination is, I believe, compatible even with the strongest repugnance; and, in their loud condemnation of the practice before the Royal Commission, English physiologists set foreign schools exactly the example one would have expected of them. But to speak of this absorbed fascination, as Mr. Oxenham does, as the 'true motive' for operations of research—operations for the most part of a most busy, worrying, and arduous kind—is to treat the genus physiologist not likewhat some of its members have doubtless been, men impatient for distinction and callous as to the means. but like idle and desperately naughty little boys. with neither brains, objects, nor ambition.

The next of these outlying misapprehensions is one for which each side is to some extent responsible. For its expression we may again turn to Virchow's fruitful address:—'What is opposed to us is the indignant feeling of the proprietors of horses, dogs, and cats, who are excited at the idea

that something similar may happen to their own beloved animals as to those of the institutes of learning'; and having soothed this sense of alarmed proprietorship by promising not to steal the pets in question, he counts in return on unrestricted disposition over the animals which are legally in his possession. Such remarks suggest that the repeated appeals of his opponents to the horror of imagining some domestic companion exposed to torture have their weak side, in giving the impression of a sort of refined selfishness. It should be possible to feel greater personal sympathy in one case than in another, without losing sight of the impersonal truth that in the world of consciousness equal pains are of identical importance. A distinction drawn or implied, between the importance of suffering to a rabbit and to a dog, on the ground of the dog's nearer relation to the inflicter of it, can be easily wrested into supporting the dangerous distinction between the whole brute creation and man. But even were selfish affection rather than pure humanity uppermost in his opponents' minds, Virchow's sweeping claim to do what he will with his own would remain equally untenable. Torture of prisoners in ancient Carthage, or of slaves not long ago in America, might have been similarly

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justified; and in gradual recognition of the claims of the weak against the strong, law naturally, though often tardily, follows in the footsteps of ethics.

Two arguments of the prophetic sort perhaps deserve a word in this list. Virchow's warning, that at this rate his opponents will soon be preventing the dissection of dead human bodies, has its pendant in their apprehension that he and his friends will soon be getting hold of living ones. As regards the former charge, the connection of a campaign whose sole watchword has been prevention of suffering, with an attack on that from which suffering is essentially excluded, is surely mere petulance. To suppose that the common sense of a whole community would tolerate the suppression of the elementary lesson-book of every general practitioner for an object for which no sane member of the community (or at any rate no Antivivisectionist, sane or insane) has expressed the slightest desire, is to suppose that the world will agree to go mad on a very simple question on the ground that it is divided on a very difficult one. As for the other prophecy of human vivisections, and the pictures that have been drawn of a nation debased by science in the course of two generations to the level of the tyrants or tyrannical corporations of history, we admit at once crude expressions on the scientific side which, if pressed, would admit of no logical barrier between man and brute. But the question here is of what would be permitted, not by individual logic, but by social sentiment. And in this, alike in its better and its worse aspect, we find a sufficient barrier; whether in the ingrained instinct that men are, what animals are not, members of an organism in which the treatment of each is the concern of all; or in the raceor caste-selfishness, which has always been prone in every society to make a marked distinction between members and non-members—a distinction easily abused, indeed, to the detriment of brutes, but hardly now to be transcended to the detriment of men.

The ground being so far cleared, we come to the question of principles. How are we to define the suffering that it is permissible to inflict? Most of the formulæ on the subject will fall under one of two heads: (1) the general rule of the physiologists, which also obtained the adhesion of the Bishop of Peterborough, that any suffering may be inflicted on animals which is inflicted for a sufficient purpose, or which is necessary for a good result; (2) the principle, ably supported by the *Spectator*, that a man may not inflict on an animal what he would not, *mutatis mutandis*, endure himself [nor permit another to inflict on one of his own race] for the purpose in question. The fatal objection to the first of these rules is that it is not a rule at all; with an air of definition, it defines nothing, the original question merely taking another form—what *is* a 'sufficient purpose'?

<sup>1</sup> It is easy to make this look absurd by neglecting the italicised words. It means no such nonsense as that the experimenter should be ready there and then, on any one's demanding it, to take the place of the animal. The large majority of experiments terminate in death, which does exactly what pain does not do, and puts man and brute into different categories, since loss of the human worker is not mere loss to an individual, nor even to his immediate circle. but robbery and violence to society at large. If it be further perversely argued that animals would object, if they could, even tobeing painlessly killed for food, we answer that the rule has no sort of claim to application in a case where we, with our complete intelligence, feel we are doing them no positive injury, but merely shutting off from them, for the support of a richer existence in another species, a tract of life which they have never, even in imagination, possessed. We might add that the particular animals we kill for food would, in most cases, not have existed at all but for that purpose; and to deplore the subsequent non-enjoyment of the actual animal whose death ministers to human life would be precisely on a par with deploring the non-enjoyment of the nonexistent animals which might have existed, instead of those now used for food, had man never dominated and moulded the brute creation.

what measures the 'good result'?-which a hundred people, cynical and humane, sensible and foolish, will answer in a hundred different ways. The second rule is also a subjective one, and would justify any one who felt conscious of exceptional powers of self-devotion in inflicting exceptional sufferings: many an inquisitor, as Bishop Magee suggested, would have gone to the stake for his faith. This rule, indeed, unlike the other, can claim for its subjectivity true practical value, in that it keeps in view the exact point which those who want a rule are liable to forget-namely. that the sole means to that conscientious estimation of others' suffering, which is a prime element in the reckoning, lies in imagining it as one's own. The rule might further claim to have at any rate a logical advantage over the other in the ease with which it can be made objective, viz. by substituting for what the individual reckoner would endure what the general moral sense of the community would expect, or what the average moral man would endure. So modified, however, it betrays its inadequacy in several ways.

First, it would mischievously and illogically confine permissible sacrifice of animals to near and obvious ends. In cases of human choice there is

an immense difference between near and remote objects. If a person long ago has sacrificed himself for distant or imperfectly realised results, we admire him as a hero, feeling that he did a difficult thing through an act of imagination which dispensed with the ordinary aids of contemporary appreciation. Now in the very act of doing this we are implying that we should not expect the average moral man to do as he did, owing to the limits of average imagination and the normal craving for the support of public opinion. And thus we should not expect an average man, though quite capable of personal sacrifice for a dear and immediate benefit to others, to make himself a unit in experiments for an imperfectly known result, in which his personal sacrifice would have no tangible equivalent. But then comes the point: in the case of an animal there is no such distinction between an immediate and a remote result of its suffering. The animal is as unable to appreciate one as the other; and it seems unreasonable to refrain, in deference to the imaginative limits of the average man, from inflicting a certain amount of suffering for the more distant good which we should be willing to inflict for the nearer, when the recipient of the suffering has no imagination to be limited.

and is personally as unappreciative of one good as the other. And if we may thus inflict on an animal for a less near and obvious (not less real) good what many an ordinary man would endure for a visible good to people he knows and cares about, we certainly may inflict more than the plain sense of the *Spectator's* rule would include.

Then again, the computations of a human being as to what he would endure for the benefit of unknown members of his race could not but be confused by the sense of the far-reaching effects inseparable from injury to a member of a closely knit society. Where the suffering and its conditions are quite abnormal, as in mutilation, this objection would apply even where submission was voluntary—for society might, and perhaps ought to, refuse such sacrifices; but it applies more especially to the question of permitting injury to another. And here the Spectator's rule seems seriously weakened by the clause in it which I have placed in brackets. The protection by society of any one of its members from tyrannous interference is obviously in its own interest, and extends to innumerable acts which no one would dream of resenting for creatures outside the human community. The above clause would really make the familiar 'scratching of a newt's tail' impermissible, since even lesser human injuries than this are punishable by law as assault. There is yet one more difficulty in taking what an average man would endure as a test. The 'average man' himself is a most uncertain factor. Not infrequently an average man is forced into being what is called a poltroon, or what is called a hero-that is, into seeming exceptional one way or the other, though to say that he is exceptional would be to contradict the hypothesis that he is average. I remember a trial for arson in which a witness was hissed for having failed to do, for the sake of two children, what she would have perished to a certainty in doing, with an equal certainty of abundant posthumous glory. All sorts of cases can be imagined in which, till the alternative is actually there, it would be hard for most of us to assert confidently what we or what the average man would do; and every fortification of ourselves in the idea that we or he would be heroic would alter the application of the test in question.

It seems, then, that the second rule, however important as a guide to individual reckoning, cannot, any more than the first, lay claim to general

validity. And as regards chances of mutual comprehension, this can scarcely be regretted; for of the two rules, taken as they stand, one would be universally repudiated on one side of the controversy, and the other on the other. What the mediator must seek is to detect under the war of words any single principle which could be accepted by any considerable number on both sides; to inquire whether each cause does not claim adherents who at bottom are much nearer to some of their foes than to some of their friends. For then an immense advance towards mutual comprehension would be made by marking the positions held on either side which are really incompatible with this common principle, and agreeing to neglect them, both as hopelessly irreconcilable, and as outside the central ground to which public opinion may presumably gravitate. That the main issue can be made to this extent definite seems to me certain; though the principle is often confusedly expressed, or even hidden under what looks like denials of it. It is no more than a carrying-out of the central Utilitarian doctrine. A large amount of suffering in the future course of life on this planet being unavoidable, the amount is to be made as small as possible; therefore, of any two alternative amounts,

the lesser is to be chosen. More fully, in measuring degrees of suffering and its undesirability, nothing but that counts; so, A and B being either classes or individuals, if A's exemption is to be preferred to B's, it is because A's suffering would be greater, and so have a wider undesirable effect than B's, not because A is superior in strength or intelligence to B. Deferring difficulties and uncertainties of application, we proceed to inquire what opinions on each side the general admission of this principle will exclude.

To begin, then, with the Vivisectionists, it excludes all those who regard the mere acquisition of knowledge, irrespective of any prospect or possibility of practical application, as an end in itself justifying the infliction of suffering. Such, for instance, is the position of Professor Hermann, who expressly repudiates any aim at utilisation, and boasts that 'science can afford to despise this justification with which Vivisection has been defended in England.' This view, popular on the continent generally, has not (as far as I am aware) been anywhere endorsed by English physiologists, and certainly found no place in their evidence of 1875. It might be possible to produce a contrary impression by detaching single sentences from

their context; but the most such cases really amounted to is that the benefits of experiment cannot be expected to be always immediate or direct; and most of the witnesses were quite explicit in their statement of the practical justification of their science. The presentation of science per se-of a knowledge whose sole use would be to titillate the brains of an infinitesimal fraction of mankind—as not only a fetish with an inherent mysterious claim on us for worship, but a Moloch with a similar claim on us for victims, is simple credulity and superstition. In no other department of science has even the lesser of these claims been advanced. Even in respect of seemingly remote branches of mathematics, the stock instance of the conic sections is reverted to with pride, as showing the ultimate utility of what at first sight seemed unpractical; and all the more concrete sciences count it their great glory to bring Nature more and more under the control of man, so that he may oppose her harmful tendencies and mould her forces to his will. 'Knowledge is power'; that is its claim to respect; eliminate the power conferred, imagine man to retain his intellectual apprehension of facts and causes while remaining a hand-tied victim of his environment, and he would rather envy the brutes than hug himself for his knowledge.

And there would seem to be a special perversity in investing experimental physiology, of all sciences, with a majesty which may fold its hands and do nothing for us. There is a great deal of knowledge which, apart from palpable benefits, can claim value as opening out juster ideas of man's relation to the universe of feelings and forces around him, and so as having a chastening and disciplining influence on his outlook on life. Such a claim would be widely made for the doctrine of evolution, whose embryological and other branches have not been in any way based on suffering. But in its own special arena, physiology seems to have more than attained this stage: the future discovery of the minuter bodily processes will interest the scientific mind, but not further discipline or chasten the general mind. The science of animal function, in health and disease, is emphatically a science which lacks the ordinary means of kindling the imagination: its beneficent power is not only its glory, but to the world at large its only glory. It is peculiarly unable to stir 'cosmic emotion'; to claim, as most of the sciences could claim, to have a distinct value in the delight

which its mere contemplation inspires. It can never (and least of all as built on suffering) become imaginatively stirring to the general public, after the fashion of astronomy, or geology, or the wider natural history of beasts and plants. Yielding to none in wonderfulness, its facts are still for the most part physically repulsive, and its conceptions not of a kind which any but professed students would be apt to dwell on: apart from questions of health and sensation, arterial pressure and the secretion of bile could never occupy a thousandth part of the place in the emotional life of mankind which is occupied by planets and tides, glaciers and volcanoes, the nebular and the evolution hypotheses. On the other hand, so far as it contributes to mitigation of suffering, the unique nature of its contribution more than redeems it in our interest and gratitude; for of all possible services, the cure and prevention of ills which outweigh and bar the enjoyment of all positive blessings seems the first and most fundamental.

We often find reference to another class of Vivisectionists, who hold that for his own species man may purchase immunities from suffering at the cost of a much larger amount to other species. This principle would, of course, be ex-

cluded by our fundamental test; but I have not met with an explicit statement of it. Such a statement as that we may freely 'sacrifice a hecatomb of animals to save the smallest pain in a man,' quoted with horror in an abolitionist pamphlet, goes for nothing unless 'sacrifice' is defined: a hecatomb of animals has been sacrificed to save many an abolitionist lady the pain of not wearing gloves. Whether practices go on, which could only be defended on the above principle, is of course another question; but the actual profession of it must, I think, be rare. For, in the first place, physiologists expressly prophesy a vast reduction of animal disease and suffering through increasing knowledge; and in the second place, since discoveries once made remain, any justification for expecting beneficial results at all may multiply itself by the number of untold generations, in which the total benefit would reach enormous dimensions. I therefore mention this class chiefly because they make such a figure in Anti-vivisectionist writings. Thus Dr. G. Macdonald, in one of his novels, founds an eloquent sermon on such a text as 'Shall I quiet my heart with the throbs of another heart? soothe my nerves with the agonised tension of a system?

live a few days longer by a century of shricking deaths?'-questions to which one can imagine but one answer. Such rhetoric errs as much by defect as by excess. The soothing of the author's nerves by the agonised tension of a system is a boon that it is well he does not crave for, as no physiologist is at all likely to offer it him; but it is equally wide of the mark to sum up his opponents' utmost hopes, as the mere 'adding of a cubit to life,' even though that cubit be the one he is himself so virtuous in consenting to forego. Give him the alternative between a certain amount of pain for twenty rabbits and a greater amount for twenty children, and I should hardly think he would hesitate. Nor probably would he take on himself to stop antiseptic dressings for a single day in the London hospitals, on the ground of our owing them to Vivisection; for in so doing he would simply be balking his opponents' purchase, of the saving of the greater suffering through the infliction of the lesser, by the contemptible expedient of diminishing the amount saved.

But whatever Dr. Macdonald might say on this point, there is an argument used on his side which expressly refuses to take count of amounts of suffering, or to attempt a comparison between

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what is inflicted and what is saved; and which is, therefore, as incompatible with our fundamental principle as the views hitherto considered on the other side. The argument is that Vivisection is, in its inherent nature, so morally degrading and abominable that that evil must alone outweigh any practical benefits derivable from it. In the words of Mr. Oxenham, 'no progress in medical skill, though it were ten times as great as the most sanguine votaries of the modern School of Torture venture to predict, could compensate for the deep and damning degradation of all that is noblest and most God-like in the nature of man himself.' Now no Utilitarian need hesitate to echo this sentence as it stands; the destructive effects of moral degradation on human welfare could not possibly be compensated. But if we give up all idea of judging of actions by the sum of their effects, and take our stand upon the single effect on the character of the doer, we shall be in danger of arguing in a circle. Mr. Oxenham must be too good a logician to infer the effect on the doer from the character of the action, while at the same time taking his view of the character of the action from its effect on the doer. Thus, if it be asked how a Vivisector is shown to be deeply

and damnably degraded, while I can answer the question perfectly in the case of certain Vivisectors. I do not see how Mr. Oxenham, in his scorn of any Utilitarian standard, is to answer it at all. I consider Magendie and Mantegazza deeply and damnably degraded for having sinned in the most flagrant way against my fundamental principle, and inflicted terrible suffering in numbers of cases with no benefit, and no prospect of benefit, to set against it; and in estimating the wrongness of their actions, I can take count of further degradation, as one among other disastrous results. But it is impossible to take one's stand simply on degradation, as constituting the supreme evil of the case, because if there were no other moral evil, there would not be that moral evil. If a man is doing what is not wrong he is not degraded thereby; and his degradation cannot be made a feature in the wrongness of his action, unless the action can be proved wrong on some independent ground, external to its effect on him. (There is indeed the alternative of establishing the degradation itself on some independent ground, by showing that physiologists are notorious for other degraded actions; but even Mr. Oxenham would hardly undertake such a Malayan muck as

this.) There seems, then, no escape from judging the actions by the test of reference to the end—of comparison of the extent of what is inflicted with the extent of what is saved. To call this, as another able writer has done, 'the Jesuit doctrine that the End justifies the Means,' is to forget that in that reproach we imply just what is here lacking—our power, namely, to prove wrongness and harmfulness in the means without reference to the end. Those who reject our test do not really seem to see that they have but one refuge. If experimenters on animals, by the discovery of a specific remedy for cholera, consumption, or cancer, 'would not have advanced far towards establishing the moral lawfulness of their practice'-if, when the question is simplified to a choice which of two sufferings is to take place, the greater is to be preferred—it can be on one ground only, that of supernatural ordinance: God sends us cancer, and that is enough. Only then the opposition of this view to ordinary moral rule, and the indispensableness to it of the theological basis, ought to be frankly avowed.

Cleared from these encumbrances, our main principle may, perhaps, obtain more explicit assent, from those at any rate who are willing to be saved from their friends. But now comes the crux; evading which, Vivisectionists misuse the principle in a way that excuses others for rejecting it. In our references to greater and lesser sufferings, nothing has so far been said implying a difficulty in estimating and comparing them. Yet the difficulty is in some cases so great that we only avoid it by admitting it to be insuperable. One suffering may be so wholly incommensurable with another that no true impression is given by calling it a hundred or a thousand times greater; in other words, the lesser, endured in a thousand frames, could not for an instant be set against the greater endured in a single frame. Nor is the essential distinction between endurable and unendurable pain at all impugned, as some seem to think, by the impossibility of drawing a distinct line between theman argument which would equally forbid us to call yellow and red essentially distinct colours. To any person who would choose (and who would not?1) that all the human race should suffer this

<sup>&</sup>lt;sup>1</sup> I had written this clause before recalling that Mr. Romanes, in a letter to the *Times*, had argued the pain of drawing London cabs to be incomparably greater than that inflicted by experiments, on the ground of there being a million cases of drawing a cab for one of torture in a laboratory. The very fact that Mr. Romanes is a clear-headed and kind-hearted man drives me to recognise our difference here as too fundamental for argument.

night from face-ache, rather than that one, that is roughly one thousand millionth of their number, should pass it on the rack, the distinction is essential-is of kind, not degree; nor would any such person consider it a reductio ad absurdum of his choice that he is unable to say, supposing the pain of the rack to be mitigable in a graduated scale of degrees by anæsthetics, at what precise point he would reverse his decision, though clearly such an extent of mitigation is imaginable as would demand its reversal. But extend the numbers on the other side; multiply the thousand million by another million, and the decision will be quite unaffected; and what is this but to say that extreme torture is incommensurable with moderate pain? The same false reasoning, the same demand for a clearly marked boundary-line in the definition of 'torture,' or 'intolerable suffering,' or whatever other designation be adopted, has been applied to the question of duration: how long, it is asked, must the suffering last, to come under the head intended? Admitting that we can include no such precise line in our definition, we again deny the demand for it to be legitimate; it is enough to be able clearly to realise cases where there can be no doubt that the line has been passed.

To this view, that torture may reach an extreme where it is incommensurable with moderate pain, it has been objected by Professor H. Sidgwick that he 'does not find, in the practical forethought of persons noted for caution, any recognition of the danger of agony such that, in order to avoid the smallest extra risk of it, the greatest conceivable amount of moderate pain should reasonably be incurred.' 1 But I cannot allow this to be a fair test. As a rule, happily, people's imaginations are sluggish in picturing possible calamities, as in other directions; and even if the calamity were well in sight, so that the imagination could not but be stirred by it, the effect on the mind of a very high probability of immunity may practically be the same as that of certainty. Prof. Sidgwick would allow an eternity of pain to be incommensurable with some finite period of pain; but, if it were possible to condemn a person to an eternity of pain, there would, I imagine, be little difficulty in finding a hundred men in London who, for the sake of a week's carouse, would consent to decide by lot at the end which of them should be so condemned—each feeling that he was sure of the treat, and nearly

sure of escaping the penalty. This is an extreme case; but on exactly the same principle a person 'noted for caution' might go to a theatre, well knowing that he ran one chance in some millions of being burnt alive there; and yet, when that fate overtook him, might fully admit the incommensurability for which I contend, and might consent to endure some tolerable affliction for years if so he might be spared the intolerable one. I do not think that the verdict could be fairly given by any one to whom the alternatives were not presented with a necessity of choice; indeed, I do not think that it could be given completely en connaissance de cause by any one who had not had a pretty recent taste of the extreme agony. My point will be sufficiently made out for the present purpose, if it is a fact that most persons would choose the chronic continuance of some endurable ache rather than submit to a long and severe surgical operation without an anæsthetic; but if this fact is disputable, I can fall back on what will scarcely. I think, be disputed—that they would ask to go back to the ache very soon after the knife was actually inserted.

One more point must be made clear before we proceed. The validity of the decision in the above

case of the pain of many versus the torture of one might be supposed to rest simply on this—that each in turn of the many ought, if confronted with the case, to consent to endure the lesser for the sake of averting the greater suffering.1 But this would land us in difficulties. For each one of the many would similarly be bound by Utilitarian morality to prefer his own, or A's suffering, to any clearly greater suffering of B, even though far short of torture-point, and yet would be justified in giving the opposite decision if there were a number of A's. Thus any one might fairly choose that B should have a very bad face-ache sooner than that a thousand other people should have a rather bad one. And this being so, it is clear that the peculiarity and the justice of the decision in the torturecase must rest ultimately on that independent sense, which a person gets for himself without reference to morality or altruistic choice, of incommensurableness between the extreme of suffering and degrees of it falling well short of that extreme. The importance of this is clear if it is recognised as the only ground which will enable us, without deserting our Utilitarian rule, to say that great or protracted torture may only be inflicted for the

clear prevention of greater or more protracted torture. Other grounds fail us. Thus, the Spectator defines torture as that which renders impossible the existence of a moral relation, and substitutes a tyrannical relation, between the inflicter and the victim, making the former a mere instrument of anguish and the latter a mere recipient of it. But the alleged presence or absence of moral relation would prove very inadequate to mark off permissible from impermissible inflictions, because equally in either case it would be represented that the relation to the animal is overridden by the larger moral relation to man. Lacking some such independent ground as I have just sketched for putting torture in a separate category, I should see no more and no less moral relation between myself and a horse, whether I flogged him for the sake of bringing a doctor to an urgent case, or tortured him for some wider beneficial result. So far as there can be said to be any isolated moral relation between me and him, it means that I am not to hurt him. But in each case alike this is violated; in each case I make him a helper for wider good by doing something he personally objects to. As far as he is concerned he is a mere 'recipient of anguish' in either case; or if 'anguish' be too strong for the flogging, we may imagine him ridden to death, like the member of the trio which succumbed in bringing 'the good news from Ghent.' Could our animals surprise us as their relative once surprised Balaam, the kindest master might occasionally hear something of tyrannical relations. And it is only my view of torture as something per se, definable as such apart from moral relations, that enables me to condemn the infliction of the extremest anguish for which I reserve the word, while holding the ride from Ghent or the production of some days of distressing illness as legitimate.

So much, then, for principles; as to which, though unable to treat them as quite the simple affair that the current formulæ would imply, I believe I have advanced nothing on which the main body of Englishmen interested in the subject need split. When, however, we come to the practical applications, when we ask what physiology is actually doing or likely to do in the way of infliction and in the way of results, with a view of balancing them, then indeed the sides fall asunder; and I can only very briefly seek to account in some measure for the divergence, and indicate the sort

of mutual allowances which might reasonably tend to its diminution.

First, then, there are legitimate grounds for strong public feeling on the subject, which should be distinguished from the illegitimate. Experts sometimes treat as a calumny the suggestion that their imagination of suffering is apt to get blunted. But that habit induces a certain indifference to others' sufferings, a certain diminution of the space they occupy in the mind, is surely too universal a truth for any one to need to be ashamed of it. In a way it is even a mercy that it is so. If surgeons, for instance, retained through life the vividness of their earliest hospital impressions, not only they but their patients might suffer. But the point often forgotten is that this does not prevent the earlier impression from being the truer one. The useless beginner, oppressed and haunted by what he witnesses, is more truly awake than the cheerful and beneficent practitioner to events actually going on then and there in the world of consciousness. He comes nearer to a reviving of that sense of the intolerableness of severe pain which every one feels to be the true sense as regards his own pain, and which is of all things the most curiously hard to reproduce in imagination. To desire, then, that habitues, in estimating the pain of inarticulate creatures, should recognise their special danger of underestimating it, is only to treat them as human. Nor must it be forgotten that science has at least as little of a moralising as of a demoralising influence; that the rough and dull within her fold retain their defects, with an immense addition to their powers and temptations; and that in spite of the vast preponderance of testimony in 1875 to the humanity of students, there was (as any one on reflection would know there must be) a darker side; ignoring which, in his regrets or demands for unfettered power over animals, the most humane physiologist gives a handle to the enemy.

Again, physiological literature and addresses naturally give an impression of scientific solidarity between different times and countries which affords some ground for erroneous deductions and indiscriminate attacks; especially since we cannot prevent our present knowledge from being based to some extent on the sins of the past. No impartial inquirer can fail to know that the callousness to animal suffering on the Continent, especially in France and Italy, is terrible. When we have first-hand accounts, when we find Bernard himself regretting the reckless multiplication of experi-

ments in his own country, when we find Englishmen smiled at for their solicitude about anæsthetics, it cannot go for much that some one has observed no special abuses during a short stay in some first-class laboratory. The truth of this picture was admitted by implication in the admirable resolutions of the British Association Meeting in 1871: fragments of it have appeared, with severe comments, in the Lancet; and many English men of science have expressed their regret at it, both in general and in detail. But on the whole they have hardly made themselves, as they well might, the leaders and spokesmen of the English view, which their leadership would redeem from any look of priggishness. If foreigners retort with references to English sport, the expert can give the one clinching answer. He can say, 'Sport is sport; but what I care about is science; and a single cruel experimenter does more harm to science than fifty humane ones can compensate, and is a worse enemy to it than an army of frantic Anti-vivisectionists. The tide of humanity may be at a different level in different places, but it is irresistibly advancing; and a man who refuses to recognise this is such a blunderer at his work as to ignore one of its main conditions.' Such language would

have more effect than anything else in inclining and helping the public to discriminate between cases which utterly differ.

What ordinarily happens is this. The appropriate atmosphere having been created by mention or description of real abominations, some reassuring phrase is then quoted—e.g. that the painful experiments in England are comparatively few; then comes the startling announcement that ninety cats have been used in a single series, and the indignant inquiry whether that sounds few; and the public goes off with the impression that what was done to the ninety cats was on a par with the most bloodfreezing proceedings of the Continent. Not one in a thousand will hunt through the large Blue-Book which would reveal to him that the cats were operated on under chloroform, and that for the four or five remaining hours of their lives their suffering was about equal to that produced in the human subject by an old-fashioned gamboge pill. The inclusion of this series of experiments in the same list with some of the worst infamies of Mantegazza is of course inexcusable; but it would be likewise impossible, but for an idea of scientific fraternity which the science of this country might well go even out of its way to dispel. It is curious, by the

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way, in what different strata of intellectual development one finds the same difference between the English and Continental attitude towards animal suffering. That the average London cabman should treat his horse as the Neapolitan does his; that a benevolent English clergyman should imitate an Italian confrère in resenting interference with some children who were plucking a live bird, because it was a shame to hinder the little innocents from amusing themselves—these things are not more inconceivable than that Lord Tennyson should give us a pendant to the poem in which V. Hugo commemorated the torture of a toad by himself and his schoolfellows; or that Mr. Matthew Arnold should have drawn the sublime picture in which M. Renan has described Claude Bernard, standing like an august priest at the sacrifice, and so absorbed in the hallowed function of burying his long fingers in the wounds he had made as to forget the cries of his victims.

Once more: who can regret belonging to the country where it is a certainty that Bernard's single classical sentence on the effects of curari, coupled with the news of such extensive use of it as he himself condemned, should spread wide excitement and alarm? But then, on the other

hand, why should this excitement waste force in knocking its head against the overwhelming evidence as to the employment and efficacy of true anæsthetics? There is less defence for the part of the excitement which depends on ignorance of tolerably elementary facts about sensation. The language of physiologists has, no doubt, been a little loose; the lay mind may be excused for not understanding the phrase 'signs of pain' to denote reflex actions in which no pain was felt. This excuse, however, goes but a little way, and nothing but a tincture of special knowledge will prevent perpetual blunders. Every one knows how exquisitely sensitive is the eye; most people know that nerves are the channels of pain; combine these two facts, and what a dreadful operation should be the cutting of the optic nerve. Yet, as a matter of fact, it is painless. If certain agitators would inform themselves, among other things, of the general insensitiveness of internal parts, including especially the brain, to treatment which is acutely painful on the surface of the body, or of the fact that the animals they describe as 'baked alive' succumb, as we should do, at the temperature of high fever, they would immensely strengthen their hands for dealing with real abuses. Nothing discredits their case so

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much as the confounding of what tortures animals with what only tortures the uninstructed imaginations of men and women. But again it must be said, as a counterpoise, that imagination may err by defect not less than by excess; I do not mean by the callousness of habit noticed above, but by natural defect, which is the more dangerous, in that, like colour-blindness, it is often unsuspected. It is strange what dim ideas the most kindly people may have of what others mean by agony. There is a paragraph in Virchow's address which looks as if it had never crossed his brain that a person can object to some experiments on animals and not to all: and an eminent witness before the Commission, as an illustration of the severest suffering he could imagine, gave a case of paralysis!

When we turn now from suffering, real and imaginary, to the past and future benefits claimed for Vivisection, it is easy to damage the *strength* of the evidence by exaggerating its *clearness*, and not allowing for the confusing effect on laymen of certain inevitable aspects of it. As it happens, by far the most vaunted example, the discovery of the circulation, is precisely the one where the opposite case is strongest; or rather would be, if its adherents, instead of resting it on words of

Harvey's which do not in the least prove it, and so getting it demolished by Mr. Huxley,1 would be content to offer a reward for the discovery of a loophole in Dr. J. H. Bridges's masterly argument.2 And in less disputed instances it cannot but strike the outsider disagreeably that the magnitude of the result seems usually in inverse ratio to the suffering inflicted. Jenner's punctures, Simpson's chloroform-inhalations, the twitch of Galvani's frog, make a damaging foil, e.g., to the experimental proof by which the French mind convinces itself that animals starve to death after they have been demonstrably deprived of the means of swallowing. Then again, the scientific world may sigh over Bell's apostasy and the fogs it led him into, or smile at Fergusson's random assertion of the futility of all experiments under anæsthetics, which could only mean that an anæsthetic reverses or suspends every process of life; but, names being names, the other side is not simply perverse in regarding Bell and Fergusson as doughty champions. Nor can broad generalities -as that the right basis of treatment must be intimate knowledge of vital processes in health and disease-impress their truth on the layman who

<sup>1</sup> Fortnightly Review for February 1878.

<sup>2</sup> Ibid. July 1876.

knows just so much of medicine as that existing remedies have been, almost without exception, discovered empirically, without any aid from such knowledge; and who finds distinct opinions in the sayings and writings of experts, as to the inferiority in value of physiological knowledge to clinical observation. Magendie's crude scorn at the idea of vivisections affecting medical usefulness, Bernard's 'nos mains sont vides,' Brown-Séquard's description of the teachings of Vivisection on the functions of the brain as a 'tissue of errors'—these cannot but seem effective weapons to those who use them.

And all this is surely a plea for long sufferance. As regards the past and present, experts might remember that their case is strongest exactly where it is hardest for others to realise its strength. That strength lies not so much in immediate applications (though between Hunter's ligatures and Pasteur's inoculations we might fill in no mean list), as in the enormously different attitude in which a doctor stands to his patient, on the intelligence of treatment which is hard to particularise

<sup>&</sup>lt;sup>1</sup> Main items in such a list would be the treatment of aneurism, of angina pectoris, of diabetes, of various sorts of asphyxia, of disease of the aortic valves, to some extent of tuberculosis, prophylaxis in cholera epidemic, prophylaxis of trichinosis, the rational application of cold in fever, and antiseptic dressing.

only because it is so all-pervading. In the very fewness of specific remedies lies an evidence how much must be attributed to this general advance; for it is no exaggeration to say that a few months in a hospital will now enable a student to smile at not a little of a most comprehensive medical work published half a century ago by perhaps the acutest physician of his day-Richard Bright. It is not the knowledge that this will cure this, or that the other, but the clear picture of a number of processes, which suggests and modifies treatment in innumerable ways. The rational abandonment of bleeding, the numberless uses of a true theory of nutrition and of the various actions of foodstuffs, the treatment of nervous diseases with reference to their origin instead of by painful local remediesthese are surely weighty instances of a substitution of rational for irrational therapeutics, resting essentially on a wide and detailed picture of the living economy. That such a picture could exist but for experimental physiology is hardly pretended, though it may exist perfectly in the mind's eye of a man who has never seen a single considerable experiment—a truth strangely ignored in the argument that great modern doctors have owed nothing to the study; and, indeed, so thoroughly pervasive

of the subject is this pictorial knowledge, that the strata of medical stupidity scarcely exist in which an Anti-vivisectionist patient could be safe against somehow profiting by it.

As regards the future, the one great excuse for distrust of experts is their frequent confusion of the just claim to be the sole authoritative witnesses as to expected results, with the totally different claim to be sole judges of the cost at which those results may be rightly bought—the latter being obviously not a technical but a moral question, to be decided on general moral principles. The larger claim lurks, of course, in the convenient formula that 'only experts can judge of the necessity' of this or that. But for this, the public would find it easier to perceive that the act of faith demanded of them (1) is demanded by many persons having no sort of personal ambition in the subject, and representing (if names be weighed as well as counted) an enormous preponderance of skilled opinion; (2) is not greater than they feel to be due in many other branches of knowledge. Experts do not conceal that in many directions diagnosis and to some extent prophylaxis are their chief trophies; but they alone can judge of the true relation of what they know to what they hope to

know; and the judgment is often a sort of trained instinct of whose processes no cut-and-dry account can fairly be required. The sort of stimulus to pathological science, derived, e.g., from mastery of the mechanism of inflammation, might be compared to the effect on philology, in its early days, of a trouvaille of inscriptions in some unfamiliar dialect. To the outsider either event is barren of meaning; to the expert each is replete with promise, not of some single separate application, but of gradual amplification and modification of the grammar of his subject, and so of further command over all that it embraces, through points of fusion with other knowledge which the philologist even less than the pathologist may be able to particularise beforehand. The growth of medicine is not simply cumulative: it is organic and transformative. The art has barely merged into the science, the science is still in its cradle. But it has already strangled some serpents; and to separate its past and future development from that of physiology is an idea which (it is safe to say) would have occurred to no one had no animal suffering been concerned.

Further to attempt an application of principles to practice would involve more technical detail than would here be suitable. I can but state my

general belief that the application is greatly facilitated by that apparent narrowing of our main principle which resulted from our view of torture; and that holding to that view, and to the truth that realisation of suffering requires an effort, we may obtain tolerably secure guidance, in spite of the frequent uncertainty of the data. But the fact that pros and cons may admit of fair balancing by no means implies that the individual most interested is qualified fairly to balance them. In work which necessarily concentrates interest and attention on immediate rather than more remote results, the general formula that on a balance of pros and cons science is beneficial, is easily installed in the background of the worker's mind, as a defence he can always resort to, and not brought forth to confront the actual things which are to be done under a vague sense of its sanction. That for many experiments there is not more than an appreciable chance of beneficial results does not imply that for many there is not less than an appreciable chance; and the good general character of science, plus the fact that the positive value of separate items of it may often be hard to prophesy or to prove, gives no right to the infliction of suffering which the general scientific mind of the time would surmise

to be not in the direction of possible benefit. There are reasons why the surmise can be better hazarded in physiology than in some other sciences. Take, for instance, two prime portions of the animal economy—the blood and the brain. Before the discovery of the circulation, it might have been safely predicted that benefit would result, in ways not realisable till the discovery was made, from exact knowledge of what the blood really did. Can the same be said of exact localisation of brain centres? Could that exact local knowledge have relevance to any except local treatment? And can it be expected that surgeons will ever make dissections of the living brain for such a purpose?

These considerations clearly have an important bearing on the question of authoritative control. They put the submission of a bond fide investigator to control on an altogether higher footing than obtains, e.g., in the case of the Factory Acts. A single expert, bent on his special idea, cannot be exactly in the position of the impartial scientific mind of his time; and the conditions of his decision in serious cases are sufficiently doubtful to make it

<sup>&</sup>lt;sup>1</sup> I am not indiscriminately attacking these brain-experiments, many of which can be rendered painless; only suggesting with what caution in their case pain should be considered.

rather a test of his realising them that he should shrink from single responsibility. But to relieve him by shifting the single responsibility to a Secretary of State is certainly not to improve matters: the chance of undue precipitation is merely replaced by the certainty of timid and uncomprehending restraint. Whatever the difficulties of detail, the one expedient seems to be a responsible Board, consisting chiefly, of course, of experts, but with some amount of representation of educated opinion outside professional ranks, even though this might entail the presence of one or two of those purblind persons who, according to Virchow's scornful distinction, take more interest in domestic animals than in the discovery of Truth'; holding, perhaps, that the central Utilitarian principle here adopted, the discovery of which at any rate required many centuries of experiments, may perhaps contain some truth of its own worth thinking about. Authoritative testimony was given in 1875 that some such Board, with complete knowledge of what had and what had not been done in various departments of physiological research, would be of positive value in organising and concentrating it; and the minor annoyance of occasionally waiting for deliberation and sanction may surely be submitted to, seeing that we have eternity before us, and that the comblete moral stability of England's position in the matter is in question. That such a Board would command public confidence is more than probable; while it would relieve physiologists from the burdens under which they are groaning, not only in particulars, by its more judicious use of licensing power, but by the general fact of being a reasoned and helpful instead of a merely watchful and hostile control. Freed thus from both the appearance and the reality of unfair restriction, English physiology, instead of appealing to foreigners to pity it, and casting regretful glances back to the pre-humanitarian days, or across the Channel to the schools whose unfettered licence the greatest of physiologists deplored, would take up with spirit its obvious rôle of proving that the best humanity is the best science.

## AN EPILOGUE ON VIVISECTION.

FEW things are more trying, even to a disinterested spectator, than to see a cause suffering from its own advocates. Especially trying, in the case of an exciting and many-sided subject, is that false simplification which reduces the disputants to two violently antagonistic camps, each collectively responsible in the eyes of the other for every sin or folly of its worst or weakest members. And worst of all is it when this thoroughly unscientific procedure is adopted by the very camp whose express watchword is Science—the camp of the faithful few charged, like Gideon and his three hundred lampbearers, to confront with the light of truth the unscientific hosts of darkness, and ipso facto, one would think, to exhibit the virtues of fairness and accuracy which it would be unreasonable to expect from their opponents.

Some thought of this kind must surely have

suggested itself to many not wholly uninstructed persons, while perusing the case for uncontrolled Vivisection in the Nineteenth Century for December 1881. The papers contained, it is needless to say, much that was true and instructive; all the more ungrateful, though in the scientific interest all the more necessary, is it to point out certain defects in them, which are only too typical of the controversy, and likely in the present case to change what might have been weighty teaching into a new source of exacerbation. The temper of Science has, no doubt, been sorely tried. Still, might not professed enthusiasts for Truth, as revealed, e.g., in the cerebral hemispheres of monkeys, extend even to the inferior workings of their adversaries' brains some measure of just attention? And might not the benevolence which will face such disagreeable labours without a murmur fairly find itself above the level of branding ignorance as insincerity? Professor Owen's talk about 'pseudo-humanitarians' and 'hired scribes.' Dr. Wilks's endorsement of Virchow's disastrous remark at the International Medical Congress of 1881 that 'the charge of cruelty was a subterfuge,' rival in rashness anything to be found in the abolitionist literature. Few blunders, indeed, seem more wanton than this affectation of ignoring the obvious objection to torture as such, by identifying it with a general hostility to all scientific learning—a hostility which, according to Virchow's prophecy, will soon be preventing the practical study of anatomy. He even asserted that there exist in every country 'all sorts of brotherhoods and associations which work energetically against scientific examination of corpses.' If so, their energy in England must have been chiefly devoted to their own concealment. But he at any rate might convince himself in half an hour that his opponents on Vivisection would repudiate any such object; and to force even on the most fanatical of them the confusion between cutting a live body and cutting a dead one merely suggests that the distinction is not a very essential one to Virchow himself. Again, Dr. Wilks complains that his opponents have selected the word 'Vivisection' with the intention of conjuring up the maximum of sensational horror. They can scarcely be blamed for their 'selection' of the only word they found in use, even though its connotation be often regrettable and misleading. But the physiologists have not been very consistent in their objection to it. Is it wholly over-squeamishness which revolts when laudation of so great a man as Harvey can

find no more succulent title for its hero than 'archvivisector'? The infliction of suffering even to save other suffering is surely at the best a grim necessity, not a thing to smack one's lips over. And at the very least one might expect that those who are confessedly writing not for the convinced. but for the unconvinced—for those, that is, who have not taken a definite side—would scan their own words, as far as possible, with the eyes of the public they are addressing; and would thus be led to perceive the picture of two sides, one consisting wholly of able and blameless devotees to duty and philanthropy, the other as exclusively of persons who divide their time between telling lies, placarding the walls with demoralising pictures, and shrieking at the idea of a mouse being pricked with a needle, to be almost too dramatic and complete. That this method of treating all criticism and opposition in a lump is as unreasonable as it is obviously impolitic will, I think, in the present instance be doubly clear from an examination of the arguments which accompany it.

It is noticeable, in the first place, that (with a single unfortunate exception) no effort is made in these papers to obtain any deeper or more explicit principle of permissible inflictions than is involved

in the licence which contemporary public opinion accords to inflictions in other directions, and in comparisons of degrees of pain and profit in the respective cases.\(^1\) This treatment has the disadvantage of precluding any clear distinction between questions of principle and questions of fact—a distinction which the nature of the controversy renders specially desirable; since on the one hand the search after an ethical basis has been much confused, or often overlaid, by disputes about all

<sup>1</sup> In the comparison of the pains of Vivisection with those inflicted in sport and in farming operations, while fully holding with Sir J. Paget that the latter are on the whole far more severe, and of course infinitely more numerous, than Vivisection as properly conducted would inflict, I cannot but think that he strangely underestimates very much that the practice has included. For instance, he compares Paris vivisections, which have had a particularly bad name, with the shooting of lions in Algeria-a rapid death, entailing less suffering for the most part than the one which Nature would inevitably bring. He says, too, that he never saw anything in any experiment worse than Landseer's 'Death of the Otter'; but the minute's death-struggle of an animal with free power to struggle and cry (a vent to the enormous importance of which human experience amply testifies) is surely quite incomparable—I need not say with the sufferings of the bound victims in the prolonged demonstrations to which he has himself borne witness, or with the multiplied day-long horrors of the veterinary college at Alfort, or the month-long agony at the laboratory of Pavia (Lancet, No. 2482, p. 415), but with any at all formidable cutting operation performed, as so constantly abroad, without anæsthetics. Putting aside this single positive point, the present criticism has comparatively little application to Sir I. Paget's careful and temperate paper, except as regards omissions.

sorts of practical and personal details; and on the other hand the evidence of facts, including much difficult matter not only of science but of human character, has been involved in all the heat of ethical controversy—the very worst atmosphere for the candid weighing of it. At the same time I think that one may dimly trace even in the two cruder contributions, what is tolerably clear in Sir I. Paget's, a sense that the true principle on which a stand must be taken is the right to inflict the lesser suffering for the sake of averting the greater. I will not dwell here on this topic, having discussed it pretty fully in the preceding Essay. One remark only I will venture to repeat, as no suggestion of it is to be found in the Nineteenth Century papers—namely, that on the above principle we must face the difficulty or impossibility of balancing a single case of prolonged and extreme pain against a number of cases of far shorter or less extreme pain. I admit with regret that this reservation must throw into opposition (theoretically at all events) more than one eminent English physiologist, who, recognising no such distinction as I drew, and thinking that possible alleviation for the many might be set against certain torture for the one, have owned that there is no extreme of pro-

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tracted agony which they would think it wrong to inflict if the object were 'sufficient.' The only sufficient object in my view would at any rate have some close reference to degree, and could not be settled by mere numbers; just as I would sooner that ten thousand hares should be coursed than that one should be nailed and crushed 'with much love and patience' by Mantegazza, or that a million horses should be overdriven than that one should illustrate the ghastly traditions of Alfort. And I would stake a good deal on finding that, of persons sufficiently interested to make a choice at all, ninety-nine out of every hundred would agree with me. But, apart from this difficulty, it is much to find the general principle even covertly acknowledged; and I believe that it is in the spirit of English physiology to recognise it more and more distinctly.

Nevertheless it is impossible quite to pass over the exception above referred to, where an explicit principle is laid down, of a different and even opposite nature to the Utilitarian one. It has figured much in the controversy, and here takes the form of a quotation from an eminent physician's address to the British Association:—'The only restriction which Christian morality imposes upon such practices is that no more pain shall be inflicted

than is necessary for the object in view.' really amazing that any one should fail to perceive this formula to be just as applicable to the elaborate Italian method of ensuring for hours or days the very maximum of torture without destruction of life, as to the momentary pricking of a baby's arm: 'the object in view' in the former case being the observation that the animal's strength or temperature is appreciably affected by that amount of pain, which from the very meaning of the words therefore, is no more than is 'necessary' for the object. 'I am seeking after truth,' the experimenter here might perfectly plead in Dr. Wilks's own words, 'and if I find it (which in this case I have done) I am satisfied.' If Dr. Wilks is not equally satisfied, his instincts are better than his logic. Disagreeably in accordance, too, with this same formula are his remarks on scientific method, according to which 'the rocks are broken and put in the crucible, the water is submitted to analysis. the plant is dissected;' and 'in animal life the same method must be adopted to unlock the secrets of nature. The question of the animal being sensitive cannot alter the mode of investigation.'1

<sup>&#</sup>x27;Contrast with this Dr. Sharpey's and Dr. Acland's evidence before the Royal Commission. The latter expressly deplores that

Nor, surely, could the 'question' of the animal being human. Had these remarks been published a month earlier, I could hardly have expressed myself as confidently as I did in the last Essay as to the practical repudiation by English physiology of the Continental view that a chance of knowledge, however remote from further benefit, may be bought at any price.

But I think it would be harsh to judge Dr. Wilks's ethical position wholly in the light of these unfortunate passages; and that, if his favourite method of analysis were fairly applied to his own and Professor Owen's principles, the result would turn out to their advantage. Even so, unfortunately, it would not go far to redeem their general mode of advocacy. Their argument will be found to contain one misstatement, one omission, and one fallacy, all of the gravest importance, and closely connected with one another. The misstatement is that the sole ground adduced or adducible for subjecting Vivisection to control is its *inutility*; the omission is of any hint that the practice has ever been *abused*; from which two lapses is born the

<sup>&#</sup>x27;so many persons have got to deal with these wonderful and beautiful organisms just as they deal with physical bodies that have no feeling and consciousness.'

fallacy—that the practice itself, like the opposition to it, can be treated in the lump, and that it is enough to prove that benefits may be traced to it for the case against restriction to be triumphantly vindicated. Of course those who deny the benefits past or future in toto-like the baronet who wrote to the Royal Commission that 'medical science has arrived probably at its extreme limits,' and can gain nothing from a practice which 'goes hand in hand with atheism'-deserve any castigation they get. But is it worthy of the scientific cause to rely substantially on an argument which is only good against these hopeless fanatics? The misrepresentation is twofold. First, a very slight dip into Antivivisectionist literature would reveal that its ablest contributors expressly take their stand not on the inutility, but on the independent iniquity, of the practice. The prima facie unreasonableness of this in cases of palpable benefit, and the ethical necessity for that fair balancing of the suffering inflicted and the suffering saved which these persons expressly disown, I have before endeavoured to show; which is surely on the whole a more judicious way of dealing with well-known opponents than to deny their existence. But secondly, the strength of the opposition to Vivisection lies, of course, in the

notorious fact that an immense amount of the suffering it has caused has been absolutely useless; in the way partly of withholding anæsthetics, partly of reckless repetitions and so-called demonstrations, partly of experiments from which it was not even pretended that any possible benefit could arise. On the last head I do not forget that, though in many particular cases a mere chance of benefit, or a mere grain of knowledge, is set against the certainty of suffering, this goes for nothing if now and again the thousand chances throw up, or the thousand grains swell into, such a single result as will outweigh all the sufferings put together. But no one will for a moment pretend that this argument applies to some of the proceedings I have mentioned, or to others which, though we have the operators' own testimony for them, I will not risk the charge of sensationalism by recounting.

'These charges do not apply to England,' Professor Owen and Doctor Wilks will reply. But then, surely, had they known the things that belong to their peace, that is the exact point they should have dwelt on, instead of attributing an agitation that sees these atrocities perpetrated in the name of Science to the pricking of mice with needles. On the topic of pain, of course, no less

than on that of utility, the ignorance and haste of adverse clamourers have bred most serious injustice; but they would have been comparatively powerless, had Vivisection at all times and places kept within the bounds which the good sense and good feeling of our leading physiologists would mark out. 'But that being so,' these last may say,' why should our apologia be concerned with anything beyond ourselves?' The answer lies partly in the very nature of a practice open alike to persons of the most opposite characters, partly in the presumable oneness of the 'scientific method.' The appearances of sympathetic fellowship with their foreign brethren are of necessity quite sufficiently strong to charge our experts with the onus of defining its limits. None can know better than they the enormous difference between the English and the Continental practice on all three of the heads I have mentioned; yet we may hunt through their writings and listen to their speeches without encountering a hint of this knowledge. 'Scientific

<sup>&</sup>lt;sup>1</sup> For a single instance, I may refer to Dr. Anthony's evidence before the Commission, Answer 2437. Or Darwin's answer, thoroughly representative of the English evidence throughout, as to the duty of using all possible means of mitigation, might be compared with the evidence of the single foreign witness—Answers 4672 and 3538–3544.

books and discourses,' they may urge, 'are not the places for moral discussions or judgments.' But how can the same be said of professedly popular papers like those I am discussing, the very object of which should be to remove misapprehensions, and to make outsiders understand what true and humane science means by Vivisection? Is it not just here that one would count on finding this highest evidence of superior civilisation emphasised with pride, rather than kept out of sight like a stigma? Whatever their own purity of aim, however safe Vivisection would be in their hands, those who publicly heap indiscriminate laudation on a practice widely associated with heartless abuses can hardly complain if the attack also is somewhat indiscriminate, and if their sensitiveness on the score of those abuses is not instantly taken for granted. What they treat in the lump and call beneficent, others will take the liberty of treating also in the lump and calling damnable; with equal reason and equal unreason in either case.

But there are things more damaging even than this reticence. What are we to say when, at this time of day, we find it seriously set forth in black and white that it is impossible for a clever and

persevering man to fail in tender regard for others' feelings, and that the invention of an ingenious machine is a quite sufficient diploma of humanity? Clearly the bull of Phalaris and its mediæval equivalents are a fable; Magendie never lived; La Fisiologia del Dolore is a forgery, or its description of its author's patience and his instrumentmaker's ingenuity a falsehood; and Sir. J. Paget's, Dr. Sharpey's, and Dr. Anthony's printed evidence about foreign lecture-rooms was given in a dream. Why does Dr. Wilks compel a reference to topics so irrelevant to English science and its professors as these? Might not such defences at least be left to the rhetoric of scientific platforms, and kept out of the open arena of the Nineteenth Century, where their chief effect must be to suggest doubts as to the humanity that can need them? But even apart from this, the argument that the practice is not in danger of abuse because none but ferocious brutes would abuse it, is radically fallacious; the dangerous fact being just precisely that it is not in brutality and ferocity, but in defective imagination and the indifference of custom, that abuses find their normal and sufficient cause. Custom is powerful for good as well as for evil; and we may rejoice to know that in English

laboratories needless repetition of an experiment involving pain, or omission to administer anæsthetics for the sake of saving time or trouble. would be regarded as a wanton outrage to scientific routine no less than to morality. But this happy and exceptional state of things is no contradiction of the general truth that even in the case of otherwise humane men, especially in youth, the prestige and fascination of research, and the weakening of separate responsibility in the atmosphere of a skilled and ambitious guild, may be serious enemies to creatures which (pace Dr. Wilks) are even more at an operator's mercy than 'defenceless children.' A natural tendency, implied in the repentance of such men as Haller and Reid, and freely acknowledged by some of our foremost experts, needs not to be indignantly repudiated only carefully watched against.

And this brings me to a further topic. Both Professor Owen and Dr. Wilks treat any sort of restraint or supervision of Vivisection not only as unnecessary in itself, but as a slur on an honourable class. The same two objections figured to some slight extent in the evidence before the Commission in 1875, though there the general disposition was very decidedly to welcome some

kind of authoritative control. A third objection, that State control would be unfairly restrictive, seems to have proved, under the present Act at least, only too well-founded; but the other two, which naturally go together, stand on a very different footing. As regards necessity, there was a tolerable consensus that if certain things were true which the Commissioners held to be proved, legislation must come; and it may be inferred that there would have been even more unanimity here. had the information of some of the witnesses been at the time within the knowledge of all. At any rate evidence of plague-spots particularly likely to be kept out of sight cannot be affected by the fact of their not having attracted wide attention. The Commission, after referring to grosser abuses (which they trusted were abnormal, though admitting here the most insuperable obstacles to obtaining evidence), reported that there were other cases 'in which carelessness and indifference prevail to an extent sufficient to form a ground for legislative interference.' It is to be presumed that Professor Owen had not recently perused this page of the report when he wrote of 'the failure of a Royal Commission to obtain evidence of the abuse of physiological vivisection in Great Britain.' In

the face of such evidence, to speak of interference as a slur would be to imply a bond of scientific esprit de corps with the clumsiest injurers of science. This sort of objection goes rather to show that the recognition of the rights of animals is still even in England rather instinct than principle. No one thinks it a slur in any business where there is danger of unwarranted injury to human frames that control should be exercised: no one takes umbrage at doctors' licenses, or at the Anatomy and the Factory Acts. The sore point in the present case seems really to be the old subject of sport, whose unchartered freedom not unnaturally keeps up by comparison a perpetual sense of illusage. Valid reasons might, however, be found for postponing that subject to the other, though, in a Legislature which deserts business for Epsom, these are of course not the reasons for which it is postponed. For in the first place, the possible degree of suffering, as opposed to the mere number of sufferers, must again be remembered; and British abuses need not necessarily be less extreme than Continental because far rarer. And in the second place, abuses in sport and in the capture of wild animals may at least be expected to decrease (as they have actually done) by the natural development of humanity—being due to stupidity and ignorance, and exposed to the full influence of public opinion; while any abuse of the other sort is necessarily a private, at the worst even a hole-and-corner business, far more demoralising in its deliberateness and secrecy; and the particular curiosity and power which join to produce the danger in the lowest stratum of the student-world are inherent in the particular education. Legislation here is more than a barrier: it is a nucleus round which nascent moral instinct may develop.

I should be sorry to seem to fail in sympathy with high-minded men who find a useful career checked for the moment by unreasonable restrictions, and themselves the objects of a clamour which on such a subject is specially easy to invoke, and which is largely (though, as we have seen, not exclusively) founded on ignorance. But the opportunity of December 1881 was a peculiarly good one; no such widely-read defence of experimental physiology is likely to appear for years to come; and it is impossible not to regret that some of the space occupied with the rebutting of 'slurs,' and with sarcasms about the follies of peers and prelates, was not devoted to more practical topics. The matter will be finally settled, not by

names and authorities, but by instruction; and for this the state of the public mind gives ample scope.

For example, it is easy to trace a widely dif fused impression that even in this country anæsthetics are seldom or imperfectly administered. When examined, the case here will be found to rest almost entirely on the shoulders of a single witness, whose words must now have been quoted many hundreds of times; his statement being that complete anæsthesia is seldom attempted, owing to the difficulty of producing it, and that if produced, it 'only lasts for at most a minute or two.' Would it not, then, be well worth while to point out in detail how little this can weigh against the evidence of expert after expert that complete anæsthesia is producible and habitually produced with perfect ease, and that it can be kept up for hours at a time, and was so kept up, e.g. in a long experiment, in which the adverse witness declared its use impossible? The only difficulty has been sometimes to prevent its passing on into death: and this has been assumed to mean that it is not complete-an assumption of just enough plausi-

<sup>&</sup>lt;sup>1</sup> See Answers 2205, 3383-6, 4334-7 and 5737-9 in the Report of the Commission, and compare 5777-8 with 3454-7.

bility to deserve the very few words which would show its groundlessness. Then again, so long as the distinction is kept clear between what is defended and what is indefensible—a condition as much of good faith as of good policy—there can be nothing but advantage in pointing out the true nature of certain experiments which, as ordinarily described, are calculated to strike the lay mind as quite other than they are. The pain of burning. for instance, known by all to be excruciating, is so through its excessive stimulation of the nerves of the skin. Now, to produce this effect in the external covering of the body, the temperature must be very much higher than the maximum internal temperature compatible with life. This latter differs greatly for different animals, and is much lower, for example, for a frog than for a man. It follows that if a frog were kept in water which would be of quite bearable heat for a man, and its internal temperature were thus raised, it would rapidly die: but to describe it as 'boiled to death' would be wholly incorrect; since the phrase would suggest the well-known action of boiling water on the skin, which, together with the pain it entails, would in the supposed case have no existence. There would be no object, now, in making this

experiment, but it serves as an illustration. Similar remarks apply to the 'baking alive,' of which a great deal has been made. The experiments in this case again were not such as need to be repeated; but the actual mode of death was certainly not exceptionally painful. The animals here being warm-blooded, and the surrounding medium not water but air, the temperature was much higher than in the above case of the frog; but it was considerably under the 260° Fahr, which men have endured for several minutes with perfect impunity, and as applied was not nearly high enough to blister the surface or injure the cutaneous The effects were internal and toxic; and the stages of death were quickened circulation and respiration, and agitation, followed either by coma or by a short period of convulsions, probably almost or wholly unconscious.1 What this means, as

<sup>&#</sup>x27;Similar experiments made on man make it practically certain that the conscious period of agitation is one of discomfort rather than of pain. The observers who have experimented on themselves have found giddiness and faintness come on at about the stage where the discomfort begins to be excessive. (Compare Fordyce and Blagden's experiments on themselves, in the *Philosophical Transactions* for 1775, with the account of Boerhave's experiments on animals in the *Mémoires de l'Académic Royale des Sciences* for 1764.) Mr. J. N. Langley has pointed out to me how closely the effects of high temperature on animals resemble those of sunstroke on man (see Maclean's *Discases of Tropical Climates*, pp. 149, 151); and

compared with what would naturally be conveyed by the words 'baking alive,' any one can judge by imagining his own state of mind if, after he had been condemned to the one, his sentence were suddenly changed to the other. Again, knowledge once gained does not need to be re-established; and it may be said as a rule that the earlier and more salient facts of physiology are those requiring the roughest experimental methods. Even apart from the change of character wrought by anæsthetics, ample testimony has been given to the diminution of the need for the severer sorts of operations, parallel with the increasing organisation of facts; and it is hard even to imagine any object now for experiments at all comparable to Bell's on recurrent sensibility. The pain of toxicological experiments is almost invariably short; and the distress of induced diseases, not more painful than those by which we expect that the majority of ourselves will die, cannot weigh for a moment against the expected benefits both to men and animals, in the dawn of which Pasteur's contemporaries may be proud to live.

sunstroke is not a specially painful form of death. Bernard says that 'si la température est assez élevée, la mort survient si rapidement que l'animal semble foudroyé' (La Chalcur Animals, p. 356).

These examples may suggest the sort of facts which can hardly be too often stated or too carefully explained, and which are ten times more convincing to a layman than the most imposing array of testimonials to character or of ex cathedra judg-I am not excusing the mistakes and exaggerations of the abolitionists; I regard them as of painful importance, since from them careless or bigoted opponents draw their cheap excuse for treating all consideration of the question from any but their own standpoint as ignorance and pre-But I do not believe that even the sumption. best instructors can exercise their legitimate influence on popular opinion, or meet opposition in a really effective way, without paying more heed to the bearings of the various points here discussed points which, obvious enough, and coming with no force at all from me, only need to be fully and fairly recognised by them to make the future of English physiology secure.

## THE NATURE OF EVIDENCE IN MATTERS EXTRAORDINARY

AMONG contemporary studies, that which (for the convenience of including its various departments under a common name) has been designated as 'Psychical Research' holds, in more ways than one, a position of unfortunate uniqueness. The main peculiarity, which is at the root of most of the others, seems to be this—that, while the study is primarily one of facts, and, to have any permanent value, must be a scientific examination of the facts as part of Nature, it offers (at any rate in some of its more striking branches) little immediate attraction and little direct opportunity to the men of facts—the men whose recognised mission is to deal with natural phenomena in a scientific way. Superior knowledge and strength of conviction are not usually here, as in other

departments of natural science, the result of skill and pains. Those first convinced of the facts are not, as a class, persons of any intellectual superiority, not persons whom some special aptitude for observation or power of reasoning has taught truths to which the great body of mankind must be led up by following their guidance; but simply persons who, without any special training or ability, often even without any will or effort of their own. have come across certain somewhat rare phenomena. It follows as a matter of course that surprising facts, in the hands of persons who are average specimens of the uncritical majority of mankind, should get involved with all sorts of misinterpretation, bad argument, and wild theory; and that the conviction of reality which the facts inspire should be equally extended to purely subjective hallucinations, and to results of conscious and unconscious deception. One consequence of this is that those who seriously endeavour to advance the study of the facts have always to be facing in two directions at once, and to wage equal war on two opposite habits or tendencies—the tendency to easy credulity on the one hand, and to easy incredulity on the other. No subject has ever suffered so much at the same time from those who profess friendship and those who profess hostility to it. And the difficulty of making way in this double-facing sort of fashion is much increased by the relation of the two opposite extremes to one another. Sometimes the path of progress gets encumbered by the cross-lunges of the infuriated disputants on right and left of it; but more often both these parties, in their desire to get out of sight and hearing of one another, get also out of sight and hearing of the unfortunate middle party on the path; and so march happily along, each claiming a victory, but without a fight, to the oft-repeated tune of a few fine-sounding formulæ.

It is, indeed, only natural that a subject so large, and for scientific purposes so new, should offer special facilities for controversialists, even with the best intentions, to miss each other and to avoid close grappling; and it is in the hope of in some measure defining the ground of the 'psychical researcher's' contention with the incredulous opponents of his work that the following remarks are offered. For it is impossible for him not to feel that the real issues between that party and himself are missed or confused, when he so constantly finds them resting their case on general facts which he would be the first to admit, and directing their

attacks to particular absurdities which he would be the first to condemn. For example, Dr. Carpenter in his Spiritualism, Mesmerism, &c., has rightly laid down the two great sources of fallacy in such matters:—the disposition to attribute whatever is not immediately understood to occult agencies; and the myth-making tendency, in yielding to which the average imagination of mankind finds its easiest and most congenial exercise. Again, he has shown just scientific instinct in his exposure of the particular lapses and weaknesses even of scientific opponents-e.g. Prof. Gregory's easy assumption that because a mesmerist caused a man to rise to the very tips of his toes by holding his hand over him, he could have held the man suspended without contact; or the same gentleman's hypothesis that the reason why clairvoyants could not read the number of Simpson's bank-notes was that the selfish motive for employing the power prevented its proper exercise. But in dwelling on these points, he contrives to give the controversy an air which saves the trouble of any close argument. The idea is inevitably suggested to the mind of the ordinary reader that any one who differs from Dr. Carpenter's conclusions must be both so incapable of a wide view of mental history and science as

wholly to overlook the common love of wonder-mongering; and so unaware of the nature and necessities of experimental research as to be willing to accept an unsupported guess for a certainty, if only it accords with a theory. There is thus little chance of a hearing for a voice which pleads for discrimination in the treatment of cases; for a fair consideration of the conditions to which love of wonder-mongering is, and of those to which it is not, relevant; and of the things which, when present, it cannot, as well as of those which it can, effect; and generally for a clear recognition and appropriate application of distinct principles of evidence, without reference to any one's theories or pre-suppositions.

'But,' Dr. Carpenter might have said, 'is not the whole effort of Science, in its dealings with the phenomena which it discredits, to make the principles of evidence distinct? Did not I myself, in the book just cited, make the nature of the scientific criterion clear to all eyes not blinded by superstition?' Well, as he was fond of the argumentum ad hominem, we cannot do better than consider his own very typical remarks on this latter point.

First, then, we learn from him that evidence of

what is new 'must correspond in strength with the degree of its incompatibility with doctrines generally admitted as true; and where statements obviously contravene all past experience and the universal consent of mankind, any evidence is inadequate which is not complete.' Into the relevance of this formula to the particular facts to which Dr. Carpenter would apply it, we need not here enquire. One might, indeed, have fairly asked him first to settle his account with his fellow-sceptics; for it must surely have somewhat bewildered him, if he chanced to read the Daily News for January 12, 1883, to find a high historical authority resting the case against the phenomena which he had discredited as 'contravening the universal consent of mankind,' on the precise ground that they have been pretty universally consented to. But it would be a task far beyond my present scope to determine how far records of past experience confirm, instead of contradicting, allegations which modern science has treated with uninquiring contempt. The present question is a more general one; not whether the formula is applicable, but whether it is true.

Let us try to imagine what the statements are, of which it would be correct to say that they con-

travene all past experience and the universal consent of mankind. Such statements can, no doubt, be imagined—as, for instance, that it is generally lighter by night than by day—but I have never heard of any one professing to bring evidence, either adequate or inadequate, in their support. And putting aside propositions the contradictions of which, though verbally expressible, have never actually been made, the only instances that it is easy to recall of anything like contradiction of universal consent are those where the fact consented to has been subsequently proved to be a figment. Such a figment was the revolution of the sun round the earth; as to which, so far from its being the case that complete positive evidence of the real facts was necessary before the old hypothesis could be called in question, that hypothesis was bound to be called in question, without a scintilla of positive evidence, the moment it occurred to any one to connect celestial phenomena with the extremely common experience that to an observer who is himself in motion stationary objects will appear to move. Matters of very wide consent, when they have gone beyond undeniable facts of sense, have naturally been matters of immediate inference from those facts. Such inferences may,

no doubt, be of a kind which, if false, would palpably conflict with some part of ordinary experience; but putting these aside, and considering that logical and reflective minds have always been a minority in the world, we may say that the more instinctive and the more nearly universal the inference, the greater has been the chance of its being unwarranted, and the smaller the amount of direct evidence required to shake it. The inferences of the ignorant find, however, an occasional parallel in those of the learned. An attempt is sometimes made to draw a distinction between the belief in such facts as the levitation of objects without contact or sense of muscular effort, and the belief in the revolution of the sun round the earth, in the following way. In the latter case, it is said, the impression conveyed to the senses of the observers was true, a bond fide result of natural forces, but it was then misinterpreted by means of an unwarranted inference; whereas in the cases of alleged levitation, the actual impression conveyed to the senses must have been false, in the sense that it was a purely subjective illusion, or else due to intentional fraud-because the natural occurrence of the event would involve the inconceivable phenomenon of action without reaction, or a creation

of potential energy (which will become active when the object falls) without any corresponding expenditure. It strangely escaped the observation of even so acute a man as Faraday, that this latter statement involves an inference logically quite as unwarranted as that concerning the solar revolution: namely that, because there was no sense of effort, there could be no expenditure of energy—in other words, that a single human sense is an infallible criterion of the forces to whose operation human organisms may contribute. To perceive and avoid this fallacy is, of course, quite a different thing from admitting the truth of the alleged facts; which must be judged of strictly according to the quantity and quality of the evidence for them. And it is really terrible to think what Dr. Carpenter's statement would commit us to; for if matters of 'universal consent' must necessarily be confronted with 'complete evidence' before we may presume to doubt them, a whole host of cases at once occur which will demand that most impossible feat—to prove a negative. It was once a 'doctrine generally admitted as true' that witches occasionally turned into black cats: was every one, then, scientifically bound to accept this doctrine until such day as the number of witches and of black cats in the world was satisfactorily accounted for?

But I do not wish to pin Dr. Carpenter down to a single sentence; let us try a few more of his utterances. 'Any statement,' he says, 'must be put out of court that is completely in opposition to the universal experience of mankind, as embodied in those laws of Nature which are accepted by all men of ordinary intelligence.' 'We must utterly fail to appreciate the true value of evidence, if we do not take the general experience of intelligent men, embodied in what we term "educated commonsense," as the basis of our estimate.'

Here is a change indeed; and at first sight much for the better. We here, at least, get an intimation that quality as well as quantity of opinion is to go for something, and that a view finds better credentials in the intelligence and education of its professors than in the fact that a multitude of human beings have unthinkingly concurred in it. But closer inspection brings disappointment. Dr. Carpenter has himself told us that if submarine telegraphy had not been led up to by progressive steps, the idea of the Atlantic cable would have been scoffed at; which at once suggests how large a part accident plays in the attitude of the edu-

cated public to any new idea. Might they not with even more reason have scoffed at an idea which was lately quite suddenly propounded, the possibility of the movement of a disc by the mechanical action of light-'a revelation with regard to matter' which Dr. Carpenter describes as 'completely transcending if not violating previous experience,' but which, he tells us, experts were so far from scoffing at that they were perfectly willing to accept it, on what ultimately turned out to be insufficient evidence? Again, to take a similar instance, would not the laws of Nature, as accepted by men of ordinary intelligence, at any rate involve the certainty that a person who thrusts his hand into molten iron will be bound to suffer for itwhich nevertheless is found on trial not to be the case?

'True,' Dr. Carpenter might have said; 'but physicists can explain why: in "educated commonsense" I include readiness to accept the dicta of experts.' Be it so; but with what a tremendous run we have come down from the general consent! Indeed, in many cases the new criterion will be found to be the very opposite of the old, for continually the expert has to resist the general opinion, before he can even begin to guide it. But let that

pass: let us examine this criterion of 'educated common-sense' on its own account. It is based ultimately, as we have just seen, on the dicta of an extremely small and specialised minority; so that we are driven to understand the 'general experience of intelligent men' to express, not what the words would naturally suggest-not the direct experience of intelligent men as to the subject under consideration, whatever it may be-but the experience that specialists are usually worthy of trust in their own subject. The criterion, then, depends on two things—the skill of a comparatively small group of men, and the allegiance to them of the general educated public. Cases, however, may obviously occur where the vagueness of these last words will cause a serious difficulty. The allegiance of the educated public being one factor in the criterion, we shall sometimes want to know who they are; to apply the criterion, we shall need a further definition of them; and, though convenient for the specialist, it would be rather too crudely circular to define them as just those who, in the particular case, pay the aforesaid allegiance. But there is a still worse danger; for what if the allegiance be found altogether to fail? Dr. Carpenter himself innocently supplies us with the assurance that this may be the

case. 'The majority,'he says, 'sometimes go mad, the few who retain their common-sense being the exceptions'; and he instances the persecutions of the witches. This is driving us from pillar to post with a vengeance. Once again we have to shift our criterion, which we must now be content to find in the opinions of a few experts minus the allegiance, or it may be in the teeth of the opposition, of the general educated public.

But we are not yet at the end of our troubles. We needed just now a definition of the 'educated public': we shall now still more need a definition of 'experts.' How are a small minority of the educated public to make good their claim in matters where the majority refuse to follow them -these, be it observed, being ordinarily just the matters where their customary method of vindicating their authority, the method of direct experimental treatment, fails them? Here clearly they cannot justify themselves to the majority; but can they even justify themselves to themselves? They have, in Dr. Carpenter's own words, 'no other defence of their position than the inherent incredibility of the opposing testimony.' If so, they must indeed be in a sad case; their defence being precisely the one which a plain man would oppose to

the assertion that a human hand may be none the worse for a plunge into molten iron. This, then, is what we are reduced to at last. After being first hunted from universal consent to the general consent of educated men, and then from this last to the consent of that handful of educated men who remain sane when all the rest go mad, we find this handful not only without the means of establishing their superior sanity in a mad world, but actually altogether disappearing as a separate class; for while they are taking their stand on the perception of inherent incredibilities, it is suddenly perceived that all the mad people about them are doing precisely the same thing. So that all these incompatible criteria of the value of evidence end by actually leaving us with no criterion at all!

I have just spoken of subjects where scientific experts lose their normal power of guiding opinion, and even their chance of making out their claim to be experts, because they cannot use their ordinary experimental methods. Dr. Carpenter would perhaps have denied that 'psychical research' falls under this category. He might have pointed out that the sphere of experiment is not confined to definite localities and technical apparatus; that experimental knowledge of mental phenomena,

especially, is gained by wide observation of human beings in various morbid and healthy conditions; and that the power of rightly estimating evidence, in general, and in particular of criticising what is known as the 'evidence of the senses,' requires a large amount of practice and skill. This is undeniably the case; and I should not only admit, but expressly contend, that there are parts of the immense field here opened up where an 'expertness' of the literal scientific kind may be applied, and may claim to be recognised.

Thus, the multiform manifestations of hysteria form a subject in knowledge of which the physician may show himself as superior to the layman as in the treatment of fever. Again, the subject of hallucinations of the senses in sane and healthy persons is one on which so much ignorance prevails that a competent knowledge of it—without which we cannot in some departments of the research make a single safe step—must be reckoned as a technical acquirement. And apart from such exceptional experiences, there are various points belonging to the natural history of illusion and error which, while obscure enough to be often overlooked, are still definite enough to enable one who does not overlook them to establish thereby his claim

For example, people have comto authority. monly imagined that they can testify correctly to what they are or are not doing with their own hands; and it needed some ingenious experiments of Faraday's to show them that, in a state of what they believe to be perfect passivity, they may be exerting pressure enough to move a heavy table. and that the pressure may be prevented if their eves are made aware of the first symptom of it by the movements of an indicator. Again-to pass to the more general conditions of human observation and memory-not one educated person in a thousand has any well-grounded view as to the extent of a conjurer's powers of deception; any one, therefore, who has taken the trouble to obtain such a view-which many a successful conjurer has never done-may claim to be an expert. Or we might take the familiar game of 'Russian scandal.' It is, in its way, a genuine experiment, and as such may result in authoritative knowledge. A person who has witnessed it frequently and intelligently enough to judge how large is the average amount of error that will creep into a statement by successive repetitions, may fairly be considered an expert, as compared with a person who has lacked the opportunity or the insight necessary for forming such a

judgment; and that the latter sort of person is immensely in the majority, even among the educated class, is clear from the surprise almost invariably exhibited by those who join in the game at a result which the expert will prophesy as certain. Or, again, the question may be one of inference. Consider the ever-fresh interest shown in 'odd coincidences'—the everlasting stories, e.g., of how A momentarily mistakes B for C in the street, and then meets C immediately after, and infers that the two facts must somehow be connected. Interest in such an occurrence simply proves that a very simple mental fact has not been observed—the fact, namely, that it was the coincidence, and nothing else, that caused the mistaking of B for C to be recorded and remembered; while the hundreds or thousands of cases where there is no coincidence where A momentarily mistakes B for C and does not immediately after meet the latter-leave no impression on the mind. Thus the few cases where the coincidence has been presented—the few successes, so to speak-stand out prominently, and are not duly weighed against the numerous failures; and A relates, as a fact worth attention, that whenever he mistakes one person for another in the street. he is sure to encounter that other within half an

hour, and he concludes there is 'something in it.'

It needs an amount of acumen which is just above the average, and to that extent is 'expertness,' to perceive that the odd thing would be if there were no 'odd coincidences' of this kind. And, beyond this, the topic of coincidences sometimes assumes a form—as notably in the very interesting cases of apparitions at the time of death—which demands for its proper treatment a certain 'expertness' in the theory of chances, and therefore a certain grasp of elementary mathematical conceptions.'

But though it is possible thus to produce a list of points connected with 'psychical research,' where one man may be truly as superior to another as in physics the trained student to the first man in the street, the great peculiarity still remains, that in psychical matters the first man in the street is quite ready to talk as if he were the expert. We are in a region where most of us seem to ourselves experts, in the sense of entertaining superior views as to what is or what is not possible or provable, but where we find no at all direct or certain way of

<sup>&</sup>lt;sup>1</sup> For a detailed treatment of several of these points, see *Phantasms of the Living*, chaps. iv., x., xi., and xiii.; and Messrs. Hodgson and Davey's papers on 'The Possibilities of Mal-observation,' &c., in vol. iv. of the *Proceedings of the Society for Psychical Research*.

making good our superiority to others. It is the land not of authority, but of opinion; where any member of the intelligent and educated public, as such, feels ready to embark on discussion at a moment's notice with any other, and, when the differences prove irreconcilable, can only take refuge in denying that other to be at the requisite standpoint of education or intelligence—an opinion which, whatever its consoling power, can only be made an argument by the adoption of the old circular method. And it is extremely noteworthy that people's confidence in their own opinion by no means always declines as the chance of appeal to skilled authority decreases. The man of general intelligence is often quite as confident in the region of opinion as the expert in the region of experiment--his confidence seeming to bear proportion not so much to possibilities of proof as to impossibilities of disproof.

The controversies which illustrate this fact naturally vary from age to age. Modern illustrations may be found in such questions as whether a body can act where it is not, or whether mind can exist apart from a material organisation, or in what sense the will is free. Nobody recognises any special body of skilled opinion on such subjects;

at any rate, nobody recognises as authoritative any dicta about them which run counter to his own prepossessions. If it be said that the obscurity of such philosophical questions does not prevent clear reasoning about them from being in the long run appreciated, and that there is at any rate a point up to which all competent reasoners agree, and a sense, therefore, in which they will acknowledge each other and be acknowledged by the outside world as experts, it must still be admitted that there is here scarcely a vestige of any such relation of skilled to unskilled opinion as normally prevails in scientific matters. In philosophy the amount of certain agreement is so small, and differences start in such absolute fundamentals, as to render 'expertness' rather a description of the qualities displayed in the process of dialectic, than a means or a guarantee for the establishment of authoritative results. Here, therefore, the class of experts occupies a position entirely different from that which Dr. Carpenter desiderates: in matters where men of equal practice and acumen are at issue from the very foundations, any wide common allegiance to them on the part of non-experts is out of the question. But over and above this difference of position, the classes of philosophical and of scientific

experts are themselves different-consist for the most part of different individuals. So far from special skill in experimental research, and the habits of mind normally connected with such skill, being pre-requisites to skilled labour in the field of philosophy, the two sorts of aptitude are rarely found united-a fact which clearly puts Dr. Carpenter's claim to extend the sphere of scientific authority still more completely out of court. We may try to regard this separation as a mere friendly division of labour; but conditions may at any moment arise which test it in a practical way, and reveal it as a radical difference of instinct. What. for instance, can be more startling, to a mind even slightly tinctured with philosophy, than the suicidal want of logic of the modern cock-sure school of Empiricists; as when an eminent comparative anatomist refuses even to take part in a trial of professed 'Thought-transference,' on the ground that it is an impossible hypothesis, and Materialism thus lays down the law to a Universe which Empiricism humbly interrogates?

'But even so,' it will be said, 'granting that philosophy is a region where authority is at present very far from paramount, how does this relieve you from the obligation of bowing to authority,

unless you mean that your "psychical" evidence would fall naturally under the purview of philosophers—that the questions which are exercising you belong to the department of philosophical as opposed to scientific enquiry?' Now, as pure questions of fact, they certainly do not so belong; and it may be convenient to state at once, on behalf of those who are seriously occupied with these matters, that they present their evidence neither to men of science nor to philosophers as a separate class, but to the educated common-sense (happily nowadays by no means uncommon) which can appreciate the broad conceptions of science, without imagining them exhaustive, or confounding the scientific with the philosophic reading of the Universe. But my present point is that the questions to which I began by referring are perpetually not treated as pure questions of fact; that they almost always get mixed up with questions which are distinctly philosophical; and that these have a most important bearing on the attitude in which the evidence is listened to, or (it may be) not listened to. The answers given to these latter questions may be good philosophy or bad philosophy; but both questions and answers at any rate entirely transcend the region of scientific authority;

experimental research might go on for ever without settling them. The rationale of individuality, of matter and spirit, of life and death-these are not laboratory questions. If men of science treat them as such, the result is simply bad philosophy, not science. But the important fact is that, whether the philosophy be good or bad, well or ill reasoned, its various forms must exercise a powerful influence on the hospitality (so to speak) of the mind towards the sort of facts which we are bringing forward. We cannot, for instance, consider ourselves cut loose from philosophy, so long as it is possible for those who have philosophically rejected the idea of 'action at a distance' to refuse on that account to examine alleged cases of 'Telepathy,' where no physical medium of transmission can be assigned; or for those who have philosophically rejected the idea of personal continuance after this life, to refuse on that account even to listen to any evidence for phantasms of the dead.1 And there is yet another way in which philosophy, so far from lightening the primary task of getting the facts fairly acknowledged, may constitute a new embarrassment. For

¹ The word 'evidence' is to be understood strictly. The greater part of what popularly passes as evidence on these subjects has no claim whatever to the name, though occasionally instructive in relation to the general subject of hallucinations of the sane.

there are points of view from which the facts might be admitted as true, but regarded as philosophically unimportant. So that here we fall between the two classes of experts—the men of philosophy declining to be interested in what does not support or affect their system, and the men of science declining to consider matters in respect of which they cannot establish their own authority by special experimentation.

But to return from the views and sentiments which affect the reception of 'psychical' facts to the facts themselves. Quite apart from obscure philosophical questions, the mere treatment of the evidence, the mode of arriving at the truth of the facts, has often no relation at all to the ordinary rules of experimental procedure; and the right attitude to new facts depends here on something which is both more and less than laboratory and hospital experiences. The method is wider but less precise, more various but less technical; and the application of it demands disengagedness and common-sense rather than any specialized aptitude. Where phenomena cannot be commanded at will (as is the case in some of the more striking departments of our research, comprising abnormal affections of the mind and senses), the work of investigating them

must consist, not in origination, but in the collecting, sifting, and bringing into due light and order, of experiments which Nature has from time to time given ready-made. And the due estimation of these depends, in the broadest sense, on the due estimation of testimony; on what may be called historical, as opposed to experimental, methods of enquiry; on that sort of many-sided acumen by which the historical student judges the records of actors and witnesses, many of whom had no idea of 'making history'; on the general sagacity by which questions of probability and credibility, and disputes as to accident, coincidence, and design, are decided in the matters of everyday life. far, indeed, from implying that the requisite sagacity-because general in its scope-is a matter of at all general attainment. The plentiful lack of 'educated common sense,' which we noted above, in connection with 'Russian scandal' and 'odd coincidences 'was a sufficient proof to the contrary; and for dealing with some departments of 'psychical research.' we saw that 'educated common-sense' must be taken to include some infusion of technical or quasi-technical knowledge. But though the requirements may go beyond the bounds of a good general education, they are still such as a few hours

of easy study will supply; and we may say, without reserve, that correct judgment in 'psychical' matters depends on points of intelligence, experience, and character, which it would be absurd to attempt to embrace in a definition, or to identify with any particular department of skill.

It naturally follows—and this I should be the first to concede—that serious students of 'psychical' subjects cannot fully claim the position which is associated with 'expertness' in the physical sciences. They cannot speak ex cathedra, as those to whom a peculiar aptitude for direct dealing with some special class of natural facts has given an acknowledged right to have their opinions on the subject of their enquiry accepted, even where only imperfectly understood. This peculiarity should be duly recognised as bound up with the very nature of the research. It does not merely depend on the fact that for the average man the questions investigated are complicated by a variety of imaginative and emotional factors; or that a large number of the public addressed do not wish to be taught, inasmuch as they deny beforehand that there is anything to learn, and are prepared with cut-and-dry opinions as to the value of evidence which they have never seriously looked at. It depends primarily on

the impossibility of demonstrating the phenomena to order, and on their aloofness from any specialized form of skilled handling. I do not wish unduly to depreciate the qualifications required. For example, in enquiries relating to Thought-transference and to Hypnotism, and (unless French science has gone singularly astray) to the effect of magnets, &c... on 'sensitives,' results may be obtained, not, indeed, always at will, but still by the method of direct experiment; and experimental work may always be done skilfully or clumsily, with or without the requisite precautions. But even here the fact that the experiments must be devised and the precautions taken by the light of common sense, and not of specialized knowledge, produces distinct effects on the manner in which the testimony of the experimenters is received by others. So far from its being accepted as authoritative, all the circumstances and chances are weighed, and various hypotheses passed in review, by precisely the same faculties and methods as are brought to bear on an historical or legal case. And in the case of the spontaneous phenomena, this is throughout the only mode of investigation. But fully admitting this, I must at the same time protest in the strongest manner against the idea that knowledge. because it is not technical, is essentially unscientific -an idea which plays a leading part among the cut-and-dry opinions just referred to. altogether deny that inductions from evidence need lack certainty, because the phenomena themselves have been observed and reported, by those who came across them, without any view to scientific ends. The whole spirit of recent anthropology and history might suggest, one would think, the illegitimacy of identifying 'science' with a command of physical appliances, and of quarrelling with one mode of arriving at truth because it is not another. We psychicists render unto Cæsar the things that are Cæsar's; we have been wont to go to the recognised authorities, wherever the recognised departments of science overlap our own: but surely no diploma of skill in the physical or medical sciences can be necessary to warrant the assertion that physics and medicine hold no monopoly of scientific method. And if it be thought a disadvantage to a subject that right judgment in it should depend on general sagacity rather than on specialized skill, we may at any rate set against this the cognate advantage that the facts themselves admit of being completely brought within the knowledge of all. In the very admission

that the advocates need not be technically experts. it is implied that the testimony which they bring forward is not of such a sort that only an infinitesimal fraction of the thinking public can form a sound judgment concerning it. And the very difficulty of the further conceptions involved, the impossibility for the present of any complete or convincing explanation, makes it all the easier in this case to separate the consideration of facts from that of theories. The appeal is thus made to educated common-sense entirely on its own level. Our business is simply to make evidence accessible —to take care that facts which easily might not be seen shall be seen. As soon as they are seen, they begin to throw light on one another; but the work of estimating their significance and forming conclusions from them must for the present be done, if not by each person by himself, at any rate independently of authority. The subject is of such a nature that we should certainly not be able, even did we desire, to persuade the public to leave it to us, or to any other small group of persons, to do that work for them.

But, while thus expressly disclaiming the sort of authority rightly claimed by scientific experts, and expressly presenting our evidence to the

common-sense which, if it presumed to pass judgment on technically scientific matters, might often be so woefully wrong, we must with equal expressness repudiate any special authority in others. And, above all, must we separate ourselves from experts in Dr. Carpenter's sense, and disown the mark by which (as we have seen) he specially distinguishes the class—the acceptance, namely, of the 'inherent incredibility' of any alleged phenomena as a sufficient excuse for avoiding serious consideration of them. On the contrary, one of our chief topics must be the historical fact that the line which can thus be drawn is of the most shifting kind: that it advances here and recedes there: that dreams become realities as fast as realities become dreams; and that the very things which have been inherently incredible in one place or age have been the commonplaces of another.

It is easy, of course, to foresee the kind of objection which this line of argument will provoke. 'Even granting,' it will be urged, 'that there are departments of knowledge, not improperly designated as scientific, where true opinion depends on historical methods of enquiry, your position will reap no benefit from the concession. The historian is successful in tracing out through

tangled conditions the true character of a person long deceased, or in evolving from a mass of biassed or conflicting testimony the fact that an event took place thus and thus and had such and such consequences, simply because there is no strong à priori probability against the person's character or the course of events having been as he describes it. The evidence, for instance, that Tiberius was in the main a great and good man, will not have to overmaster any conception of a natural impossibility, or even improbability, that a Roman emperor should be great and good. But in the case of your alleged facts such conceptions exist, and exist legitimately, being, in fact, merely a recognition of the known course of Nature. Even if it be granted that an experimental expert, qua his skill in experiment, has with respect to them no jurisdiction, that general conception of the uniformities of Nature which owes its existence to special scientific researches will none the less be authoritative; and it demands the rejection of your evidence, and makes the character of your witnesses irrelevant. Testimony which would be unimpeachable in the affairs with which the lawyer or the historian has to deal must here be unworthy of attention.'

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This objection has a great look of strength; for while it in fact contains both truth and error, the truth is patent and the error latent. In the first place, it is quite true that the amount and quality of the testimony requisite for establishing new or unusual occurrences cannot be determined without distinct reference to à priori improbabilities. And. in the second place, all our realisation of past delusions as to natural law still leaves us with a legitimate and ineradicable feeling that the world in our day is so well known, that Nature has been so widely studied, the inter-connection of her departments so well understood, and local and partial views of her so completely supplanted by the diffusion of a common education, as to make radical upsettings of our positive conceptions of her improbable to the verge of impossibility. But we must be careful that the strength with which this feeling comes home to us does not carry with it a prejudice against alleged experience, of however unusual or novel a sort, as likely to unset our previous conceptions, or to contradict anything about them except their finality. The very strength with which the conceptions are held ought surely to secure us against such timidity. It has again and again happened that observation of facts has outrun the

knowledge of their conditions, and that opinion as to the facts has in such cases been widely led astraywhether in the direction of credulity or of incredulity depending on the temper of the individual or the age; and then, after a time, analogies present themselves, or the special conditions which made the facts possible are more completely elucidated; and it is found that there has been no breach of continuity, and no contradiction—only a further extension and determination-of natural law. And neither in the advanced and seemingly impregnable positions of modern science, nor in the wide diffusion of a common education, do we find any sufficient ground for supposing that new or unusual facts will cease to appear and gradually make good their position in the natural scheme. Rather might we expect that, as the tide of evolution flows on, the novel conditions which produce such facts would necessarily come into existence; and that, as ready means of communication are everywhere multiplied, the isolated facts which, owing to their isolation, were once accounted unusual, and pro tanto discredited, would be recognised as constituting a distinct natural class. Certainly, then, confidence in natural law, and in the positive conquests of Science, need constitute of itself no barrier

to the admission of new or unusual facts. But when such testimony, instead of being jealously tested on its own account, is ruled out of court, when men deny that it can have any appreciable value at all, when the best of it is treated as on a par with the worst and the accumulation of it as a mere summation of noughts, we encounter a fallacy of the gravest kind. The supposed absence of previous experience, a purely negative induction, is first treated as having the same positive value as experience itself, and elevated into a law of Nature; and then the presumption of improbability against facts which contravene the law, instead of being weighed against and regulated according to the forthcoming testimony, is counted twice over - a process of weighing by which the testimony is easily made to kick the beam. Let us briefly examine this double fallacy.

It will not be necessary to pause long on so obvious a proposition as that negative inductions from experience are, from their very nature, not final; and that to make them final is arbitrarily to close the door on the possibility of new conditions which may affect the result.\(^1\) This hypothesis of

<sup>&</sup>lt;sup>1</sup> The same may, of course, be said of positive inductions; but in their case there is not the same danger of overlooking the limit-

new conditions no doubt demands careful use. For there are cases where the existence of the supposed condition is in itself quite as improbable as the occurrence of the alleged fact; and in such cases the à priori improbability of the new fact is not at all diminished by the assumption of the new condition; the issue is merely thrust a step further back. For example, the existence of a 'mesmeric effluence,' capable of being shed from the human hand, cannot be said to be in itself more probable than the fact recorded by Dr. Esdaile, the production of anæsthesia by a draught of the water over which passes have been secretly made; and it would be absurd to complain of a person who declared the fact—the alleged production of the an-

ing conditions. The reason, I think, is this. An overwhelming majority of the assertions of Science being concerned with the things which can and do happen—things definite in kind and distinctly represented in the mind—it is natural that the assertions should in every case contain precise and complete recognition of the conditions of the happening; Science, indeed, may be said to consist of such precise and complete statements. When, on the other hand, assertions are made to the effect that things do not or cannot happen, the fact that such things are necessarily indefinite in kind (for no one takes the trouble to classify nonentities), and as a rule are indistinctly represented to the mind, has a tendency to prevent any precise or complete statement of the conditions under which they do not happen; as a substitute for which it is common to supply a vague general reference to the 'experience of mankind.'

æsthesia-to be impossible or violently improbable, for ignoring the 'effluence,' the supposed condition of its occurrence. But there are other cases, where the alleged fact is scarcely less remote from analogy than this, and equally depends on new conditions, but where a like improbability does not apply  $\hat{a}$ priori to the latter. So far from being improbable, indeed, the new conditions may even be palpably present. Take, for instance, the case of recent experiments in Thought-transference. The new condition here has simply been that the phenomenon shall be repeatedly and steadily tried for-that one or more minds shall for a time be concentrated exclusively on a particular object, with the view that the impression of it shall be transferred to another mind. Yet an able opponent has actually argued against the occurrence of the fact, on the ground that, had it been possible for it to occur, the history of human intercourse would have been different. as our whole stream of thought from moment to moment would have been visible to our neighbours. The conditions under which the fact of Thoughttransference is alleged to have been observed could not be more flagrantly ignored. And in face of such an instance and such a blunder, the assertion for any negative experience of mankind (even

supposing it to have been uniform and universal) of a positive value, which not even the best testimony to a different result can outweigh, surely loses its plausible sound. It is not the vindication, by comparison, of the infinitely greater against the infinitely less amount of experience; it amounts to a positive assertion that a new fact, to which clear analogies are not forthcoming, can never be proved by testimony—what is practically nothing less than a veto on the advance of science by a purely empirical road. The veto is pronounced, moreover-as has been well observed—in the very teeth of the one induction from experience, which, of all others, may be pronounced historically and scientifically valid—namely, that 'other inductions from experience, and especially negative inductions, are not final'

But the tendency to regard alleged new facts off-hand as contradicting experience, instead of as limiting a negative induction from the absence of experience, is not the only difficulty with which testimony to the extraordinary has to contend. A more insidious fallacy lies in first regarding facts as improbable or impossible on the ground of absence of evidence, and then, when evidence is offered, refusing to look at it on the ground of this

very improbability or impossibility. That educated persons, otherwise trustworthy, testify to marvels, is expressly made a ground for undervaluing their testimony, in weighing it against the improbability of the fact. The argument is briefly this: 'The fact is so improbable that extremely good evidence is needed to make us believe it: and this evidence is not good, for how can you trust people who believe in such absurdities?' I do not mean that the circularity of the reasoning is often so explicitly brought out; it can easily be concealed by a little expansion; but that these are the lines along which many minds unconsciously work I am quite confident. Nothing else will explain the carelessness or unfairness with which some of our own evidence has been treated, by critics not habitually careless or consciously unfair. I may refer to a single recent instance where the common objection to a chain of deductive reasoning-that it is as weak as its weakest link-was suddenly brought to bear on the inductive method. and the Saturday Review discovered that a collection of items of evidence is as weak as its weakest item. Somehow or other the evidence must be disallowed—that is the instinct which is at the bottom of such a piece of criticism; any

evidence tending to prove the improbable fact thereby forfeits its claim to respect. Now clearly the value of the evidence ought to be judged, in each case, not by what it tends to prove, but by considering the facilities for observation or malobservation, and the capacity and character of the observers. The improbability that the evidence shall be false has as good a claim to be independently estimated as the improbability that the fact shall be true. The more completely the fact lacks analogies among previously-known facts, the stricter, of course, must be our requirements as to the amount and conditions of the evidence: if we could mark on a scale the degrees of evidence necessary to establish various facts, then, the newer the fact, the higher must the line be drawn. But even for the newest facts, at any rate in cases where the conditions of observation are simple, the evidence-line remains far lower than is often realised. Taking the case of only six witnesses who will speak the truth, and for each of whom the chance of being deceived under the given

What the chance of being deceived is may be a matter unexpectedly difficult to decide, and requiring very special investigation. A novel and elaborate proof of the extent to which intelligent persons may be deceived by skilful conjuring, under conditions which appeared to them to make deceit impossible, will be found in the

conditions is one to ninety-nine, Babbage deduces that the improbability of their independent concurrence in testifying to what is not a fact is five times as great as an assumed improbability of two hundred thousand millions to one against the marvel which they are supposed to attest. This method of quantitative estimation is not wholly satisfactory; but it may fairly be pressed to the point of showing what a very small amount of good testimony-under simple and definite conditions of observation—is sufficient to outweigh the whole argument from the previous universal absence of experience. The improbability of the fact might be quite fairly represented as the improbability that this testimony would ever be forthcoming for it: when the testimony is forthcoming, no deduction can be made from it on the ground of the improbability of the fact. That im-

papers above referred to, in vol. iv. of the Proceedings of the Society for Psychical Research; and shows the inherent rottenness of the evidence on which the huge fabric of modern Spiritualism has principally rested. On this account, while gratefully acknowledging how much this part of my Essay owes to the previous enforcement of the same principles of evidence by my friend, Mr. C. C. Massey, I must express my total dissent from the application which he has made of them to Prof. Zollner's experiments with the notorious medium, Slade. (See Appendix A. to his translation of Zollner's Transcendental Physics.)

probability has already been counted *once*, in fixing the amount and the conditions of the evidence required; there can be no excuse for counting it again.

It would be easy to trace out this circular fallacy further; and it is at the root of most of the prejudice which our work encounters. I may just point out one other form which it is sometimes found to assume. 'It is improbable or impossible that these facts should occur,' our opponents say, 'for if they were in rerum natura, it is improbable or impossible that they should not have occurred before: Nature is uniform.' Yet when we venture ourselves to illustrate this uniformity of Nature—when we take such a case as apparitions at the time of death, and point out that the human race have always been hearing of them-we are told that we ought to be ashamed, in this age, of reviving the discredited superstitions of the past. That is to say, certain events cannot be believed to happen now, because they did not happen then; and they cannot be believed to have happened then, because they do not happen now.

I will conclude with a comment on two less obvious topics, which have had an important place in the present controversy.

1. Considerable injury has been done to the argument for the credibility of novel events by Babbage's illustration of the calculating engine. This machine produced a series of similar results long enough to persuade any intelligent looker-on that the production of such results was the law of its being, a uniformity which it could never transgress—when suddenly the series was interrupted by a single isolated exception, after which it resumed its former regularity. Now this illustration no doubt contains a true analogy to natural process, in opposition to the vulgar conception of miracles; for the complete law of the machine, the set of causes which in time produced the exception, was, of course, in unbroken operation from the beginning. But the mind recoils from the idea of such sudden and complete exceptions. We demand some perceptible graduation of causes-that some qualitative resemblance shall be perceptible, at any rate after the new event has been observed, between it and other events which preceded it. We perceive no analogies for the supposition that underneath the play of natural forces, as observed with all our skill and patience, there is a modification of conditions of which the course of events shows no sign except in one catastrophic moment

-a stealthy approach to something which, when it happens, will present no kinship with other obser-If the arrangement which contains such exceptions cannot be pronounced à priori impossible, the deceptive cunning of it is alien to our conception of Nature as a system in which, as we gradually extend our knowledge, continuity and the inter-connection of processes become more and more apparent. All our experience of novel discovery as further confirming the uniformities of Nature, by lighting up vast tracts of it and enabling us to explain past events and to predict future ones, confirms our instinct in this respect; and negatives a line of invisible events issuing in a visible event which throws light neither backwards nor forwards, recalling no comprehensible intimations of itself in the past, and as to the future leaving us in the dark as to how many more such shocks may not be in store for us. The continuous latency for us of a condition which in itself is entirely on a par with the host of patent conditions—of a condition which ex hypothesi has been at work in the very events that we have been observing, and is not a new supernatural factor suddenly imported into a natural order-is, in fact. almost impossible to conceive as part of the unassisted play of Nature. We, the observers, being part of Nature, and the orderly Nature known to us being a Nature in relation to our faculties, the supposed persistent absence of the relation in one out of the myriad interconnected lines of natural process inevitably suggests a previous winding-up of us and of things to that result, a sort of preestablished absence of harmony-or a pre-established harmony between this particular line of process and our own powers of persistently overlooking it. The more we try to picture so sheer a breach between Nature and our comprehension of her, the more persistently (to borrow Clifford's phrase) will an inward monitor of which we can give no account whisper 'Bosh!' And it is hardly necessary to point out how strongly the natural instinct here is confirmed by the modern doctrine of evolution-opening up as it does to the imagination almost limitless possibilities of novelty, while at the same time it connects perception of law in the very widest way with perception of tendencies, which were just what Babbage's machine concealed.

2. As regards 'impossible hypotheses' -- there are two hypotheses with regard to Nature which can be pronounced impossible in an *à priori* way

with a quite unique degree of certainty; the hypotheses (1) that matter, and (2) that energy, can be destroyed or created. But if we examine into the ground of this uniqueness, it seems to be thisthat while all carefully-tested experience has been that neither matter nor energy has been destroyed or created, we cannot even picture to ourselves an experience which would prove the reverse. Of any other event which we are accustomed to hold impossible, we can picture to ourselves the proof. We can picture a man 50 feet high; and if enough accurate observers had examined him, we should hold his existence to be proved. We can picture a pencil writing without visible support; and if the testimony to it reached a certain level, such an occurrence would have to be admitted as a reality, But in respect of the two hypotheses above-named, the utmost we can picture is an experiment where matter or energy would appear or disappear, in the sense of transcending our means of ascertaining how it arrived or what had become of it. Now suppose the most delicate and exhaustive physical means to be applied, and to fail to account, say, for the disappearance. Our choice of hypotheses would then lie between destructibility and some explanation which might, prima facie, seem equally

wild, such as the passage of matter through matter. But in the absence of any reasonable ground of decision, the latter hypothesis would be bound to For the escape of matter and energy in unobserved ways is familiar to our everyday habits of thought—e.g. where water evaporates, or where a stove cools without the room becoming sensibly warmer; and this instinct would suffice to turn the scale in favour of the view that our means for following them in their course had, after all, not been exhaustive. So again, no novel exhibition of energy—not even an apparent 'perpetual motion' -would convince us that new energy had been created; in the extremest case, our instinct of analogy would lead us to prefer the hypothesis that pre-existent energy was really at work, though in some untraceable form. To destroy our conviction that matter and energy are invariable in amount, nothing less than a whole new genus of experiences would be needed. This observation is of some importance; inasmuch as the idea that the amount of one or the other might vary is perpetually used, and was used even by Faraday,1 to prove the existence of a vaguely-defined class of impossible hypotheses, evidence for which must be

Lectures on Education, pp. 55-6.

ruled *d priori* out of court; without any perception of the fundamental difference between these two hypotheses, which are 'impossible' in a strict and special sense, and the other supposed representatives of the class. Every hypothesis must be judged on its own merits; and the character of this particular pair clearly affords no countenance whatever either to such general assertions as that in scientific inquiry 'clear ideas of the naturally possible and impossible' must precede the examination of facts,—i.e. must precede the means by which alone they themselves can be produced -or to such special applications of that principle as I exemplified above, in the recent attitude of a distinguished anatomist towards the hypothesis of Thought-transference.

VOL. I. T

## THE UTILITARIAN 'OUGHT.'

In one of the acutest and by far the most amusing of all speculative works known to me-A Defence of Philosophic Doubt-Mr. A. J. Balfour says that 'the whole of our morality must be deduced from general principles which are not, and which cannot be, themselves inferences from particulars.' Expanding his view in an Appendix, he defines an ethical proposition as one 'which prescribes an action with reference to an end,' the fundamental proposition, or major premiss for any ethical deduction, being that such and such an end for me is final and chosen for itself alone; and to such propositions, over and above the character already mentioned of being essentially general and not inferences from particulars, he attributes the further character of being essentially non-scientific and not based on experience. The great peculiarity of the above definition of ethical propositions clearly is that it includes non-moral and immoral propositions equally with moral ones, and gets rid therefore of the differentia of the latter which has been held to consist in universal obligation: in other words. 'I ought to do so and so' can only mean 'I find or consider so and so binding on me,' and can never lead on to 'You ought to consider it binding on you.' Nor is there any escape from this conclusion, if Mr. Balfour's account of ethical propositions is exhaustively correct in respect of all systems. first object in this Essay is to show that in respect of at any rate one system, Utilitarianism, it is not exhaustively correct; and my mode of doing this will be by inquiring to what extent the two characteristics above mentioned apply to the basis of that system—that is to say, whether, or in what sense. the basis of Utilitarianism is (1) non-scientific, (2) general and not an inference from particulars.

Mr. Balfour defines Science as 'knowledge of phenomena and the relations subsisting between phenomena.' Roughly speaking, he says, a scientific proposition 'may be said to state facts or events real or hypothetical,' which description, he holds, does not apply to a proposition announcing obligation. 'I ought to speak the truth' 'does not announce an event; and if some people would say

that it stated a fact, it is not certainly a fact either of the "external" or of the "internal" world, i.e. either of physics in the widest sense or of psychology. Now the proposition 'I ought to speak the truth' is clearly with most thinking persons only a conclusion from some more fundamental proposition; the major premiss of the implied syllogism being, for the Utilitarian, 'I ought to do that which promotes the greatest happiness,' or some kindred phrase. My contention, then, is that this Utilitarian major premiss is not simple, but compound; and that it is made up of two simple elements, an ultimate fact and an ultimate axiom, which fact and axiom are both in nature entirely scientific.

Before examining them, I may concede at once that the basis of the system, as commonly stated, does undoubtedly come within the range of Mr. Balfour's description: for reasons which will appear as we go on, however, I should be glad to begin by stating it in this form, and examine the results, before stating it in my own. As commonly conceived, then, the fact may be thus expressed:—I find my happiness to be a desirable end; and as multitudes agree with me in this experience, it may be further asserted that the happiness of each of these individuals is in the same sense a desirable

end. We now come to the axiom, which may be put thus: -- the happiness of A, and that of B, and that of C, being each in the same sense a desirable end, the happiness of A plus the happiness of B is more of a desirable end, or a more desirable end, than the equal happiness of C. Now at this point an ought clearly comes in; for I should say that any one considering the case, ought to admit the truth of this axiom. And in using such terms, I at any rate can limit myself to the same meaning as when I say that any one who considers whether a whole is greater than its part ought to decide in the affirmative. That which Mr. Balfour holds to be the differentia of ethical, i.e. according to him of non-scientific, propositions, I hold equally applicable to the axioms of Mathematics, each of which is by implication 'a proposition announcing obligation, which itself requires no proof; 'and equally in their case the assertion of obligation, if denied, leaves the asserter without any argumentative reply. Practically, I should say that the chances of denial are equally remote in the two cases; that every one who finds happiness to be desirable at all, will, on exercising his reason, perceive the happiness of the greater number to be more desirable than that of the smaller; and that

though, if he be C and an egoist, he may prefer C's happiness to the similar happiness of A and B, his reason can have no part in that preference, in which he will not expect any impartial and rational fellow-creature to concur.

Why, then, is the Utilitarian system, as thus based, open to the charge of being non-scientific? The usual answer of course would be that in passing beyond the theoretic statement, and bringing the axiom of greater desirability into relation to conduct, we introduce a sense of duty which is essentially non-scientific. I shall have to speak of this further on; and will only here remark that the answer at any rate does not seem open to Mr. Balfour: who, clearly perceiving Ethics to be concerned not with the causes but with the reasons for action, has pointed out that it would remain wholly unchanged if not a single man ever had done or ever could do right. Duty surely implies possibility. But waiving this, and deferring the question whether in relating the ought to action we shall really affect its scientific character, I want first to show how, even restricting it to theoretic ground, we still cannot thereby make our system scientific. For though the axiom be scientific, the fact to which it was applied is not. As above

given, the direct axiomatic judgment that the happiness of the greater number ought to be preferred as the more desirable end, presupposes that the happiness of each individual is already absolutely desirable, in the sense not of that which is desired or capable of being desired, but of that which ought to be desired. And this primary judgment, that happiness ought to be desired, is an ethical and not a scientific judgment. The ought (granting that it can be legitimately used) is of a totally different sort from the scientific ought which came in with

1 This distinction, as is well known, was overlooked by Mill. who assumes as self-evident that that is 'desirable' which 'people do actually desire'; and thus, after showing that what each desires for himself is a good, that this good is happiness, and so that general happiness is a 'good to the aggregate,' he can imagine himself to have given a complete proof that the general happiness is what each individual ought to desire. Mr. Balfour's expressions seem open to a similar charge of ambiguity. His assertion that the fundamental ethical proposition of every ethical system states an end which an adherent of that system 'regards as final-as chosen for itself alone,' can only be reconciled with the statement (which Mr. Balfour rightly calls tautological) that ethical propositions announce obligation, by taking the words 'chosen for itself alone as 'one which he ought to choose for itself alone.' The fundamental proposition, according to the literal meaning of Mr. Balfour's words, would lack, and lead to deductions lacking, any ethical or obligatory character at all. How, for instance, is 'I choose my own pleasure for itself alone' other than a scientific statement of pure fact? And even if I say 'I cannot help so choosing,' it is a scientific statement of compulsion, not an ethical statement of obligation.

the axiom; the fact of the difference being as intuitively felt as the sense of the *ought* in either case. Is it possible then to find some other way of basing the Utilitarian system, which shall contain no *ought* except the axiomatic one? It seems to me that this may be done as follows.

We must first get our primary fact so stated as to keep clear of the confusion between 'the desired' and 'the desirable.' How will 'I feel a desire for happiness' serve? It sounds sufficiently undeniable, but on examination it in turn proves to be ambiguous. It may mean, 'I feel a desire for happiness quá happiness;' or, it may mean, 'I feel a desire for happiness qua mine.' Which of these two quite different meanings is the true one? To answer this question I must ask another. Do I desire your happiness as well as and apart from my own? do, I am forced to conclude that it is happiness qua happiness, not qud mine, which is for me the desired par excellence, or the general end of action; for while my seeking my happiness apart from yours (which I often do) is quite compatible with the hypothesis that happiness qud happiness is my end. my seeking your happiness apart from mine (which I sometimes do) is quite incompatible with the pypothesis that happiness qua mine is my end.

Now, as a matter of fact, I do desire your happiness -not in the least because I ought, but because I cannot help it. I desire it, moreover, apart from my own-apart, that is, from any sympathetic pleasure which the gratification of the desire might bring me; for I should desire it even if I knew myself to be on the brink of annihilation. This, then, I take as the primary fact required; and if I were the only person whose morality was concerned, I might proceed instantly to my argument. But, as I am writing for others, it is necessary to point out that, as far as I have got, every one of my readers practically agrees with me. For the proposition, 'I feel a desire for your (or for the general) happiness,' is one which only those could be held to deny who, if convinced that the general happiness could be secured by their lifting a finger, would refuse to do so. A thoroughly selfish person may be an altruist, as long as no sacrifices are demanded of him; and the immense amount, the immense preponderance it may be, of unreflective egoism in the world is perfectly compatible with the fact that, with those who reflect at all, the altruistic attitude is the normal one. It is commonly not by deliberate choice as against the general happiness that a piece of egoistic happiness is preferred, but

by keeping the idea of the general happiness out of sight; or, in many cases, by some such 'flattering unction' as, e.g., that the suffering which might be alleviated, at the cost of some indulgence of one's own, is so infinitesimal a drop in the ocean of misery as to make the sacrifice quixotic. This voluntary blindness or self-deception does not, as a rule, outlive the actual moments of gratification; and the perpetual reversion, in the intervals of life between, to the impartial and reflective standpoint of the general end, cannot but give to such moments the air of aberrations.

And now to proceed. The primary fact is, 'I feel a desire (not only for my but) for your happiness.' This statement is clearly psychological and scientific, announcing no obligation. A similar description applies to the more extended form 'I feel a desire for the general happiness,' which is just as much an assertion of scientific fact as 'Sugar gratifies my palate.' For simplicity's sake let me reduce this latter form to 'I feel a desire for the happiness of x, y, and z, all strangers to me.' I now go on to say 'I desire the happiness of z and z more than the equal happiness of z.' But I now claim to bring in the axiomatic ought, and say that I ought so to desire; the fact

which justifies my doing so being simply the fact that a comparison has been instituted, and an alternative presented which needs to be reasonably decided one way or the other.1 The sense of axiomatic obligation attaches not to the desire where there is no alternative, but to the preference where there is an alternative. As long as my or any other happiness is considered absolutely, I do not feel that I can make a distinction between 'I ought to desire,' and 'I do desire.' Imagining myself alone on a desert island, 'I feel that I ought to' would simply signify 'I mean to'; and if there had never been such a thing as comparison or conflict of interest, if the gratification of every one's desires had always been completely compatible with that of every one else's, and the gratification of present desires with that of future ones. I do not see how the idea of an ethical ought could ever have presented itself: every one who felt a desire for others' happiness would have felt that desire to be as natural and as little obligatory as I should

<sup>&</sup>lt;sup>1</sup> The comparison may take place even within the limits of individual experience, e.g. where there is a conscious weighing of a lesser and nearer against a greater and more remote pleasure, in cases where we can eliminate the ordinary bird-in-the-hand notion which depends on the comparative uncertainty of the future.

feel my desire for my own happiness to be on a desert island. I do not think that even the fact that other people did not share the feeling could have suggested the judgment that they ought to share it, inasmuch as ex hypothesi such absence of intuition on their part would not have had any effect in preventing or diminishing any one's happiness. But as soon as an alternative is presented, as soon as I am asked whether, of three equal actual ends of mine, the happiness of x and of y and of z, I prefer the result that one should be attained and two unattained or that two should be attained and one unattained, I cannot decide on the latter without at the same time feeling that I am under a reasonable obligation to decide on it, precisely similar to that which drives me to admit in any other case that two is greater than one. It would be nothing to the purpose to reply that, desire being a mere matter of fact, not under the control of the will, if any person were so abnormally constituted as in fact not to desire the happiness of x and y more than the equal happiness of z, the 'ought' of Ethics would not apply to him. My point is that the 'ought' of Science would. Belief is as little under the control of the will as desire; but, however unable a sane person was to believe some mathematical axiom, we surely should not hesitate to say that he 'ought' to believe it.

And having arrived at this point, I seem to have reached ground on which I can make myself the z of the alternative without altering my sense of obligation. If a particular choice appears reasonable to me when the letters are merely the symbols of some three real but still unknown individuals, nothing can make it appear reasonable to me that I should alter my choice (though very likely I should alter it) when I find that z is to be myself. Had I known this to begin with, had the question never been presented to me except with s as myself, I might well have been unable to apply the axiom, because there would have been no principle of conduct to confront with the very probable fact that my happiness is actually more desired by me than that of x and y; but after passing through the stage of considering and deciding the alternative on impartial and purely reasonable ground, I cannot afterwards, when no change is introduced except that a particular name, my own, is given to z, decide differently and at the same time feel that I am deciding reasonably. If I egoistically prefer z's, i.e. my own, happiness as the end most desired by me, it is simply an 'I mean to,' not an 'I ought

to.' Reason will have nothing to say to it; that is, though I may not be acting unreasonably. I shall certainly be acting non-reasonably; just as, to anticipate a future point, I hold myself to be acting not unreasonably but non-reasonably in seeking my own happiness when there is no alternative in question. And if the one decision is thus nonreasonable, the other must be reasonable, unless the alternative admits from me of no reasonable solution. Nor is there any real illegitimacy in applying an axiom, and so getting an ought, on the understanding that a certain thing (the happiness of x and y) is the thing actually by me *more* desired, and retaining the ought even when that thing has become, it may be, the thing by me less desired. For there is nothing essential to the reasonableness of the comparison and the validity of the decision in the fact of its being my own particular mind in which the compared desires—the actual terms of the comparison—as well as the comparison itself, take place. The decision that of two things which are essentially ends, the greater, i.e. that which has most end-stuff in it, must qud end prevailthat in reason the end cannot but be preferred for which there is actually going the greater amount of desire—if valid when the lesser end and the two

which together make up the greater end are all desires of mine, loses nothing of its axiomatic cogency, by a change in the mental habitat of one or more of the desires; any more than the axiom 'things which are equal to the same thing are equal to one another' loses in cogency by a change of the position in space of some particular trio of equal things. The perception of the more end-stuff, the more of that the essence of which is to direct action, cannot be affected by the fact that the less with which it is compared has its place in my mind, and through that momentary proximity looks more to me.

To this reasoning it has not unnaturally been objected 1 that my use of the word 'end' involves the same ambiguity as we found lurking in the word 'desirable'; that my 'end' slips over from fact to duty—from that which is to that which ought to be desired; and that if 'more end-stuff' were consistently confined to 'that which stirs more desire in me,' I could never argue anything to have 'more end-stuff in it' if in fact it does not stir more desire in me. I believe, however, that this objection can be completely met. A thing which is not at the moment most desired may yet have 'more end-stuff in

By Miss Martin (Mrs. James Ward), in Mind, vol. vii. p. 556.

it,' in virtue of its conformity to a larger general end: and this larger end, though in my view strictly scientific-an' is preserred,' not an 'ought to be preferred'-is not necessarily one that is preferred at every particular moment. It is preferred generally, not necessarily always. Thus, in calling happiness and happiness the general end of action, I mean neither that it is what ought to be aimed at, nor what is at any moment desired or most desired: I mean that it is that with which the idea of ultimate end-of the desired par excellence-is most profoundly and habitually associated. A man may say with truth that success at the bar is his ultimate and pervading end, without implying that he ought to have adopted that profession rather than another; and if he neglects important business for a day, and amuses himself in the country, which is what he that day most desires to do, he will feel unreasonable, because he has within a short period of time acted as if two mutually exclusive things, amusement and success at the bar, were 'the end.' I feel a similar unreasonableness when I adopt, through egoism, some course which entails on the whole less happiness, less therefore of that which in my habitual view and by inveterate association is identified with endstuff. Happiness being posited as the general end, then, in every alternative which presents a pair of particular ends, it ought to be seen that that which entails more happiness is the greater end—has more of what is habitually regarded as conduct-directing stuff; and a jar is produced by conduct which, being directed to what has less conduct-directing stuff, would lead an impartial spectator to suppose that the above axiom is not seen.

It is conduct, then, that gives reason a chance. What my egoism may make it impossible for me to prefer in my actual desire still remains for me what it is reasonable to aim at in my conductwhich, to be reasonable, must follow my axiom and not my accidental desire; the difficulty of keeping my axiom in the form 'ought to prefer or desire' something which, it may be, I cannot prefer or desire being relieved just by this power of preferring in conduct—by this possibility of converting the 'ought to desire' into 'ought to aim at.' If the axiom were confined to desire, to the exclusion of conduct, it might be represented that desire and volition, with their tendency to act independently of reason, produce in any axiom into which they enter an essential difference from other quantitative axioms. For while one can say not

only that the whole ought to be acknowledged as greater than its part, but that to any individual at any moment it actually appears so, one cannot say that to oneself at any moment one's own desire for the larger total of happiness actually appears greater than one's desire for one's own particular bit; but only that the total end, when viewed from the reflective standpoint to which the mind habitually reverts, must be acknowledged as greater. For the moment egoism may make it appear less: and if it were then impossible for me to acknowledge it greater, the scientific character of the axiom that I ought so to acknowledge it would certainly suffer; but conduct gives me a means of showing, and of knowing, that I acknowledge it greater, even in the teeth of my own egoistic desire.

Here, then, we seem to have got what we sought, a Utilitarian basis with no ought in it except the scientific or axiomatic one. And it is a basis suitable to all conditions of mind except one. If any one starts with an ethical (non-scientific) intuition that happiness ought not to be desired, the scientific proposition (which he might perfectly accept) that if he does desire it he ought in reason to prefer the less to the more, would not be a principle of conduct; for the scientific

'ought' could have no ethical validity against the prior ethical 'ought not.' But it cannot be argued, conversely, that for the scientific 'ought' to have ethical validity there must be a prior ethical intuition that happiness ought to be desired; all that is required is the absence of the contrary intuition. Given a man to whom happiness is the desired par excellence, and who is aware of no intuition that conflicts with his desire, and we can at once call on him to prefer the greater to the less.

The prevalent instinct that the obligation of assent is radically different in the case of ethical and of scientific principles seems to depend on this—that in asserting that we believe scientific axioms we rarely have occasion to add distinctly, even in thought, the words 'and so ought you'; whereas in asserting ethical axioms, those words represent as a rule what is most prominent in our intention. For in the subject-matter of Science there are never any temptations for men to set at nought the rational axioms, which are therefore accepted practically as well as theoretically. in the subject-matter of Ethics such temptations are numerous; and we seek to bring other people's actions into conformity with our principle, by keeping perpetually before their eyes the fact that

theoretically it is also their principle—the principle which as rational beings they cannot but admit to state the rational end of conduct, and which therefore they can only transgress under pain of running counter to their reason. But no difference of nature is here implied between the theoretical and the practical ought; the former means 'must hold, as a rational being'; the latter means 'must do, under pain of running counter to reason'; which clearly in no way extends the meaning of the obligation. Ends are of course essentially different from anything else, such as iron, which can be quantitatively estimated, and there must accordingly always remain a sense in which the difference between an axiomatic statement of duty and an axiomatic statement of fact may be called essential: but this difference lies in the subject-matter to which the axiomatic ought is applied, not to the form or oughtness. I do not of course deny that the meaning of the practical ought may be extended by Utilitarians, as it is by moralists of other schools, in such a manner as to justify Mr. Balfour's view of its non-scientific character: all I am concerned to show is that it can be used in my sense, and that then the parallelism can be made complete between the ethical and the scientific

series of propositions. 'You find (experientially) that a pound has weight; you ought (theoretically and rationally) to hold that two pounds have more weight; if you wish to avoid absurdity, you ought (practically and rationally) to sink a plummet with the latter rather than the former.' 'You find (experientially) that the happiness of an individual is an end; you ought (theoretically and rationally) to hold that the happiness of a plurality of individuals is more of an end; if you wish to avoid absurdity, you ought (practically and rationally) to promote the latter rather than the former.' In the second series, no less than the first, the final imperative is in form hypothetical: but in the second it becomes truly categorical, in so far as every one whose mind acts at all shrinks inevitably from the jar of being consciously absurd. And even if this imperative were regarded not as supplanting but as supplementing an ought of purely ethical intuition, its share in that uniform certainty which is common to scientific axioms might still give it very great practical value. I am aware that the value will be different for different minds—that some to whom the above view may appear logical (if there be any such) will still hold that it has no particular substance or importance. Personally, I should be hard to convince on this point; inasmuch as I never consciously prefer or feel inclined to prefer my own happiness to the greater happiness of others, without feeling an obstacle in the passionless axiomatic reflection that two is more than one, and that my happiness, since it 'cannot be a more important part of good, taken universally, than the equal happiness of any other person,' ought (from my habitual standpoint as to the end of action) to be a lesser aim than the greater happiness of any other person or persons. Whether the axiom, when this latter obligational form is given to it, ceases to be 'scientific,' is perhaps no more than a verbal question. The word is at any rate an intelligible one, to describe that quality of quantitative axioms which is common to them all, and in comparison with which any element that is not common to them all—that differentiates, e.g., a quantitative axiom in Ethics from a quantitative axiom in Geometry-appears quite subordinate.

But it may be said that there is still one peculiarity of the ethical ought which, even after the scientific character of the Utilitarian proposition has been carried as far as I have carried it, remains irreducible; the fact, as expressed by Pro-

fessor Sidgwick, that an ethical proposition is 'inseparably combined with an impulse to action of a peculiar kind, which it is necessary to distinguish from non-rational desires or inclinations'; that the cognition of rightness is 'the cognition of a dictate or precept of Reason,' which phrase 'implies that in rational beings as such this cognition of rightness gives an impulse or motive to action.' Now this impulse or motive to action can clearly only exist for me in relation to my own action; so that if its presence is made essential to the Utilitarian proposition qua ethical, I shall never be able to use that proposition either generally, as 'The greatest happiness ought to be aimed at,' or particularly, in the second person, as 'You ought to aim at the greatest happiness.' I do not think, however, that Professor Sidgwick would allow the essential difference, implied in Mr. Balfour's view, between ought in the first and ought in the second person; and in that case, as I can see here no via media between Mr. Balfour's view and my own, I conceive that Professor Sidgwick's sentences must be susceptible of interpretation in a sense consistent with the essentially scientific character of the Utilitarian proposition, even as used in the first person. I should say, then, that the scientific character of that proposition is not affected by the mere fact of its being

combined with an impulse. The judgment 'This smell is disagreeable' is inseparable from an impulse to get away from the smell, but it is none the less a scientific proposition; and the difference between such a proposition and the Utilitarian one lies simply in the latter's having an end as its subject-matter, and so stating, as scientifically reasonable, the precise fact which the impulse repeats: 'I ought, scientifically, to recognise the superior dimensions of a certain end, and my impulse corresponds with my cognition.' that I would deny to the ethical proposition, as I perpetually make it, a peculiarity intuitively felt as such, and transcending the ground of scientific assertion even when that assertion is taken as inclusive of an impulse; but that peculiarity does not for me reside in the proposition qua proposition, but in the further mental condition in which it is often affirmed. As the above-mentioned impulse does not present itself in the 'You ought' but only in the 'I ought,' so I should say that this further peculiarity does not present itself even in the '1 ought,' till that proposition is more or less deliberately and definitely related by me to my actual

future conduct; the peculiarity then consisting just in what was noticed above, a unique sense of jar and conflict if conduct and reason are allowed to fall out of unison—an ultimate dislike to allow conduct to become unreasonable, such as I find otherwise exemplified in my refraining several times a day from doing some perfectly indifferent and trivial action, the idea of which comes across me, but of which I simply feel that its purposeless performance would lack rationality. And it seems to me that I am justified by Professor Sidgwick himself in thus assuming the sufficiency in Ethics of reasonableness and unreasonableness as essential and ultimate notions. For in considering the strange persistency of the question 'Why should I do what I see to be right?' and in accounting for it most happily by showing that several different views of the ultimate reasonableness of conduct exist side by side in the thought of ordinary men, so that an answer from one point of view always allows the question to slip round again from another, he seems to imply that, could these views of ultimate reasonableness be harmonised or reduced to one, the question 'Why should I do what I see to be right' would be set at rest-which in turn must surely imply that the judgment 'I ought' need

not be in essence anything more than ultimately reasonable, however peculiarly coloured in the process of relating it to one's actual conduct. I may further suggest that, on Professor Sidgwick's view that the desire for one's own happiness, or 'rational self-love,' is one ultimate principle, and, as such, inclusive of the 'peculiar' ethical impulse 'which it is necessary to distinguish from non-rational desires and inclinations,' this impulse must after all have such an enormous range of application that its *peculiarity* will not prevent its being rather the rule than the exception.

To return now to our analysis of the Utilitarian proposition: we have seen how it is in the supervention of the axiom on the primary fact of experience that the scientific ought comes in; but I should say further that this, too, is the point at which the proposition becomes rational, as opposed (not to irrational but) to non-rational. Thus, when Mr. Balfour expresses his view of the non-scientific character of ethical propositions by saying that 'the rational basis' of any ethical system 'must be something other than an experience or a series of experiences,' I am able to endorse his words; only I should apply them similarly to many scientific systems. I imagine that the basis

of any system dealing with quantities, in order to be rational, must include more than mere facts of experience, such as 'Stones have weight,' or 'Happiness is a desired end.' It must include at least one axiom: that is, it must include something in which the mind does more than merely receive and record; something in which it is active, even though the activity be no more than trying to conceive the opposite and finding itself baffled in the effort. In Ethics the primary experiential basis, that happiness is an end, becomes rationalised only when I superpose the axiom, and assert that the happiness of the greater number must be acknowledged a more abundant end than that of the smaller. Similarly the fact of experience that a cubic foot of iron has weight only becomes part of a rational basis for mechanics when we superpose some axiom, and say, e.g. that two such cubic feet must be acknowledged to have more weight; not till then can we perceive power to be economised by a lever which makes use of the former to raise the latter. Another consideration is this: if the mere taking happiness as an end is to be held reasonable, a mollusc often shows itself reasonable; while yet, as we do not attribute to it reason, its reasonableness is a matter not of its but of our perception. It is surely best to avoid language which would thus drive us to predicate a reasonableness divorced from reason and unknowable by its possessor.

It will be seen that to limit the use of the word rational in the way I suggest is not by any means to make Utilitarianism the only strictly rational system. For, in the first place, the intuitions which can strictly be called rational are not confined to quantitative axioms. Thus the ultimate mode of inference of the ordinary syllogism is rational, and its validity matter of universal intuition; so that any ethical basis which can be represented as the necessary conclusion of such a syllogism will be at least formally rational, whatever its premisses may be. For instance, 'The message of revealed religion emanates from Omniscience; the rules of revealed religion as to what we ought to do are part of its message; therefore the rules of revealed religion as to what we ought to do emanate from Omniscience, i.e. from a source which knows what we ought to do; ' or, in other words, we ought to do what revealed religion prescribes. Here the non-scientific ethical 'ought' is not got rid of; but the intuition respecting it being shifted from us to Omniscience, I have to admit that, so far as the major premiss of the syllogism is to anyone as certain an intuition (or a conclusion from intuitions as certain) as that happiness is an end, his ethical basis is as 'rational' as mine, and he can equally demand that all who agree as to his premisses shall accept it. And the basis being the conclusion from a syllogism, Mr. Balfour's assertion that the several principles at the base of all ethical systems must of necessity be underived and require no proof, certainly seems to require some proof of its own. In the second place, the quantitative axiom itself is of course applicable to the primary statement of something other than happiness as the desired end, e.g. perfection: but the number of those who adopt the basis of Perfectionism, while clearly distinguishing it from that of Utilitarianism, is so small as to be safely neglected. It may thus, I think, be said that only in the Utilitarian system can an extremely common individual experience of feeling be supplemented and universalised by the axiom or intuition of reason, and the 'I ought' thus pass over directly to the 'You ought.'

According to this view, I should avoid using rational to mark the distinction drawn by Professor Sidgwick between the two principles of Egoistic

Hedonism. 'If the Egoist strictly confines himself to stating his conviction that he ought to take his own happiness or pleasure as his ultimate end, there seems no opening for any line of reasoning to lead him to Universalistic Hedonism as a first principle. . . . When, however, the Egoist offers, either as a reason for his egoistic principle, or as another form of stating it, the proposition that his happiness or pleasure is Good, not only for him but absolutely, he gives the ground needed for such a proof. For we can then point out to him that his happiness cannot be a more important part of Good, taken universally, than the equal happiness of any other person.' That is to say, the latter position is plainly irrational; but on what terms can the former be called rational? In the case of that lusus naturæ, a person wholly devoid of the altruistic instinct, or in the case of an Altruist living on a desert island, it might seem pedantic to object to calling his exclusive seeking of his own happiness rational, though I should still prefer not irrational; but even in such extreme conditions, I should not see the rationality of his saying that he ought to seek it. Waiving the obiection above suggested that he could not truly feel he ought to in any sense distinct from he means

to, and granting for the moment that he could so feel, what is there, I ask, in point of rationality to distinguish that feeling from the feeling of warmth or of hunger? Is any safe ground of definition to be found for rational, if once we allow the extension of the word to propositions which do no more than state an individual experience, and to which no assent of others can be 'rationally' demanded? And certainly no assent of others could be rationally demanded for a proposition which would in itself be just as much non-rational when made by them as when made by him. Assent of others can only be rationally demanded for axioms which. just because the assent can be demanded, we call scientific; and we have seen that the ideal Egoist -one whose 'primary fact' is that he feels no desire for any happiness except his own-affords no chance for any such axiom to be applied.

This same distinction of rationality, and so of universality, will of course mark off any Utilitarian proposition from the non-moral and immoral ones which are included with it in Mr. Balfour's definition of the essence of an ethical judgment. The connection between obligation and rationality (in the strict sense which I have been defending) reinstates the connection which he disowns between

the obligation of a moral law and its universality, in the sense that all intelligences ought to regard themselves as bound by it. He says we may dismiss this connection, because it amounts to saying that there is a moral law obliging all intelligences to be bound by other moral laws, and that this law would need in turn another moral law behind it, so that we should be committed to an infinite series. But, according to my argument, the assertion that 'all intelligences ought to regard themselves as bound' is not a moral law but a scientific assertion; provided that for 'all intelligences 'we substitute 'all intelligences which share the primary non-ethical intuition that happiness as such is a desired end.' The substituted words will not suggest to the Utilitarian a very large concession, part of his business being to prove that they potentially include 'all'; e.g. to show that the desire for one's own and others' happiness is implicit in motives where its presence is overlooked, and to dispel prejudices which prevent the admission of this, by pointing out that the Utilitarian principle produces rules of conduct identical with those approved by holders of would-be adverse principles; and so far as he succeeds, his law is universal, just because it is axiomatic and so

in the strictest sense rational. And to all who share that primary intuition about happiness, the cogency of the law may be immediately asserted, however little they may have been aware of it; the universal cogency of the axiom that the whole is greater than its part, or that two is greater than one, being quite unaffected by the fact that some one has never chanced to bring it to bear on some particular subject-matter. However many people took to denying those axioms, those who still held them would still feel that every one ought to admit them. And this would involve the rejection of another of Mr. Balfour's individualistic dicta, namely, that 'to be bound by a moral law is exactly the same thing as to regard it as binding on you.'1

It is worth while to note in passing the point of practical difference between a state of things where each individual merely felt it to be *his* duty to make the happiness of others his end, which of

<sup>&#</sup>x27;This proposition, which Mr. Balfour again puts forward as self-evident and without proof, would be still more markedly contradicted if the syllogistic conclusion above suggested, that the precepts of revealed religion ought to be obeyed, were a valid ethical basis; which depends of course on the truth of the non-ethical premiss that such religion is the voice of Omniscience. Granting that, the universal validity of the conclusion would remain wholly unaffected by any individual's omission to perceive it.

course would be the utmost limit of Utilitarianism attainable on Mr. Balfour's principle, and the ideal of true Universalistic Hedonism, where, with the same feeling as to his own duty, each would feel that it was also the duty of others. The sense of solidarity and security derivable from the sense that it is incumbent on others to regard my happiness, seems to me fully as important as that probable increase of my happiness through my own altruistic impulses which has been a hundred times more dwelt on, and which of course might exist as well on Mr. Balfour's principle as on mine.

So much for the question as to the scientific and rational character of the Utilitarian proposition. I pass now to my second question,—in what way can that proposition be said to be general and not an inference from particulars? If we recur to our former analysis, the primary fact, 'I desire your happiness, or everybody's happiness,' or 'I find such happiness an end,' is clearly general only in the sense of shortly summing up a number of particular cases of my experience, each of them as certain as the collective statement, which has no authority beyond their certainty; it is based on particulars, just as 'I find sugar sweet' is based on particulars. And as regards the supervening axiom,

that, the happiness of an individual being an end. the more the individuals the greater the end, we have only to apply Mr. Balfour's own account of the axioms of Mathematics, where he points out that "two hundred and forty pence and twenty shillings being each equal to a pound, are equal to one another," is one of an indefinite number of similar self-evident propositions which are described by saying that "things which are equal to the same thing are equal to one another," 'but which it would be absurd to deduce from that general premiss, inasmuch as the individual conclusion is to begin with as certain as the premiss. The particular cases of deciding that the greater amount of what is essentially an end must be acknowledged as more of an end than the lesser amount, do not derive their validity from correspondence with the formula: each is ultimate in itself.

In discussing Utilitarianism I have been confining myself so far to the simplest type of the doctrine. We may of course be called on to decide questions more difficult than the balancing of greater and lesser lumps of individual happiness, or of similar happiness enjoyed by a greater and by a lesser number; e.g. the question of balancing the greater happiness of a lesser against the lesser

happiness of a greater number, or the pain of some against the pleasure of others. There are, however, noteworthy gradations of difficulty in such cases, in some of which the scientific certainty seems quite attainable. For example, the assertion that for myself I would not endure a night's toothache for the sake of a day's walk in the country, is as completely a statement of psychological, i.e. of scientific, fact as the single terms 'I like this.' 'I dislike that.' As to the mode and degree in which pleasures and pains can be estimated and compared by the individual like plus and minus quantities, this primary psychological fact may present much that is obscure; but there is no obscurity about the fact itself that they are so estimated and compared, and that in the experience of the individual + 6 will not balance - 7. And when I pass on from the individual experience and say, and call on others to say with me, that such an amount of pleasure in A ought not to be purchased by such an amount of pain in B (à fortiori of course in a plurality of Bs), I am merely, as in our former case, supplementing a scientific fact by a scientific axiom. The obligation of admitting that the want of balance between the +6 of pleasure and the -7of pain is independent of the question in what particular individual or individuals the pleasure and pain are exhibited, is precisely on a par with the obligation of admitting that the necessary equality in size of things equal in size to the same thing is independent of the question of what particular substance the things are made.

The case of weighing the pain of one against the pleasure of several stands on different ground, owing to the difficulty here of applying a self-evident axiom to the data of individual experience. There would be an opportunity for the 'ought,' however, in many cases where the several items of happiness, distributed over the many people, were such as could be successively enjoyed by a single person; as he could then decide whether he would purchase the lot for himself at the price of the single item of pain. For instance, I suppose that a good many people would purchase half-a-dozen nights at the theatre by the pain of the extraction of a bad tooth; but I doubt if the most enthusiastic playgoer would purchase a hundred nights at the expense of the pain of an amputation. On this principle I could rationally say that the five minutes' happiness of a thousand people ought not to be purchased by the five minutes' misery of one. But if the question were whether the eternal happiness

of a thousand might be purchased by the eternal misery of one, though I should certainly give a similar decision, I cannot say that any one ought to agree with me with the immediate ought of rational intuition. I can only show that neither could one who differs from me use the ought to me. I should not, it is true, despair of supporting my opinion here by the less direct method of showing the obligation of justice to be a fair deduction from the fundamental Utilitarian proposition; and then maintaining that the only way of bringing justice to bear on the case would be by confronting in turn each member of the thousand with the one whose misery would be the price of his happiness, and deciding in each case that the price is illegitimate.1 But, even so, questions are easily imaginable which would admit of no precise mode of decision; as we see if we think of the infinite number of degrees between c.g. balancing the prolonged happiness of many against the minute's considerable suffering of one (where I think the former might fairly preponderate), and balancing the month's moderate cheerfulness of many against the minute's agony of one (where according to my intuition the former would kick the beam); and just in proportion as this

<sup>&</sup>lt;sup>1</sup> See above, pp. 26-28.

uncertainty and probable difference of opinion exists, I should say that there is no *rational* basis for decision. This may seem to be a considerable concession to Mr. Balfour; practically, however, I doubt if it would often prove so.

On another point in Mr. Balfour's discussion. his account of the moralist's duties, a very few words will suffice; since his view here, being entirely consistent with his view of ultimate ethical propositions, is subject (if I am right) to the same modifications. Holding the essentially non-scientific and individualistic character of these propositions, he naturally holds that the moralist is concerned simply with the fact of their existence, not with the proof of their validity; and that his function is to help each man clearly to ask and answer for himself the two questions, 'What do I hold to be the ultimate ends of action? and-If there is more than one such end, how do I estimate them in case of conflict?' In respect of the moral systems whose fundamental propositions truly answer to Mr. Balfour's description, this account of the moralist's chances seems unassailable. But so far as Utilitarianism is in the strict sense rational, as above contended, its preacher can of course occupy himself with the proof of its

validity, by getting people to apply the axiom we have been discussing to their individual intuition of happiness as an end.1 Nor do I quite follow this sentence,—' Above all he (the moralist) must beware of substituting some rude simplification for (what may perhaps be) the complexity of Nature, by deducing (as the Utilitarians do) all subordinate rules from one fundamental principle, when, it may be, this principle only approximately contains actual existing ethical facts.' These actually existing ethical facts are, I suppose, the various ends which individuals actually regard as final. And if, after the clearing away of all confusions, you still hold to some other end than mine, I cannot of course call on you to deduce subordinate rules from my principle rather than from yours; but the actual ends accepted as ultimate are hardly so numerous that it will argue crude disrespect for the complexity of Nature if I show that my principle is implicitly avowed in, or is the rational extension of, yours. And as regards the deducing of subordinate rules for myself and my fellow-Utilita-

<sup>&</sup>lt;sup>1</sup> Even a system which would deduce its fundamental principle from God's omniscience, as above suggested, gives the moralist wider scope than Mr. Balfour admits; for indirectly, at any rate, he will be occupied with the proof of his principle, in proving the truth of his non-ethical premiss.

rians, why am I to beware of it, any more than of deducing my geometry from certain intuitions and axioms which to some one else, for aught I know, are not self-evident?

My last point of difficulty is this. Mr. Balfour says with regard to changes of ethical system, that 'what we mean, or ought to mean, by an improvement in the past, is an approach to our own standard, and since any change at all corresponding in magnitude to this in the future must involve a departure from that standard, it must necessarily be a change for the worse.' Now does he mean for the worse according to the ideas then existing in the world, or for the worse according to the view which we, with our present ideas, would take? He can hardly mean the former, since (1) there is absolutely nothing to put the relation between our successors and ourselves on any different footing from that between ourselves and our predecessors beyond whom we think we have morally advanced; and (2) according to Mr. Balfour's own statement, a superior system of morality means one which we should adopt if presented to us'; and as our successors may be expected at least to have knowledge of our systems, the hypothesis that they would at the same time cleave to one admittedly inferior is negatived. But if the supposed future system will only be worse than ours in the sense that we, with our present eyes, should regard it as such, I do not see why that need at all distress us, since it will be better than ours in the eyes of all whom it will actually concern.

Mr. Balfour might agree so far, though his tone rather suggests the contrary; but a more radical objection is this. His view implies that change and development of moral systems extends of necessity to the most fundamental principles. Even of the past this is only true within limits; since much of moral philosophy has been concerned with making actual principles explicit, and reconciling apparent contradictions. But, what is more, the process has been increasingly of this kind; so that as regards the future I cannot see why we are driven to imagine any change of the most radical kind; why we may not regard the 'approach to our standard' which has taken place in the past as likely to continue in the future, and to be more and more an approach of practice to an admitted principle. If the Utilitarian sees the history of the development of his principle to have been the gradual making explicit of the primary intuitions that happiness as such is an end, and

that of what is essentially an end the larger amount must be the larger end-what is there to suggest to him that, if once the principle were universally acknowledged and acted upon, men would begin to gravitate away towards some other principle? To suppose such a tendency seems something like supposing that if once Evolution succeeded in completely adapting species to their environment, it would then begin to reverse its operations and to tend towards the survival of the unfittest. Neither in the evolution of morality nor of physical life has the condition of stable equilibrium been reached, and so change has been perpetual. But the change in the external environment, which, so far as it is continuous, implies a necessarily unstable equilibrium in the result of physical evolution, has nothing corresponding to it in the moral sphere; where the changes associated with changing forms of society have followed no blindly cosmical series, but (it is surely not too much to say) have been more and more consciously related to a dimly recognised ideal. Nothing that we can conceive as happening will make happiness less of an end, which, so far as attained through social impulses, is self-confirmatory and self-propagating.

FEW speculations of recent times have presented so imposing a view in so small a compass as the late Professor Clifford's brilliant paper 'On the Nature of Things-in-themselves.' When that paper was first published, I was struck with some difficulties in the argument, which I did not subsequently see noticed in any of the reviews of its author's collected Essays. I did not venture at once to put them forward, not exactly knowing how far the theory had been taken seriously: it seemed at any rate at the time to excite curiously little attention, for a doctrine which, if right, would be so neatly and exclusively right, and if wrong, should apparently be susceptible of easy and precise confutation. It gradually became clear, however, that others had long been occupied with the idea, and believed it capable of great

development. And in addition to this, the tone of some later criticism on the subject of Spinoza suggests certain more general difficulties in the whole position of dogmatic Monism, which may, I think, gain in force from comparison with those inherent in Clifford's peculiar form of it. A very few words of introduction will serve to indicate the way in which the problem presents itself to ordinary minds, and the point at which Clifford takes it up.

I imagine that the stages which the mind normally goes through, as regards the question of the existence of things external to the perceiving consciousness, are these.

The first stage is one which uninstructed persons scarcely ever, I think, get beyond: the unquestioning idea that the things they see would be somehow there, lying about in space, whether or not there had ever been any mind to perceive them; that when they are there, a substance, or a something, underlies their sensible qualities, and is quite external to the feeling in the percipient. Clifford's opinion, on the other hand, is that, the externality divined by uninstructed persons is simply the element of externality in the 'social object,' the conviction that the object is a real or

possible object to other *minds* outside one's own. This view certainly does not agree with my experience, even as regards persons of good general education.

The next stage arrives, to most of those who pass beyond the first stage, when Idealism of the Berkelevan type is first presented to them; and generally, I think, the first impression is that such Idealism is a flawless theory of existence. The more obvious difficulties-that we need an explanation why my sensations and yours often exactly correspond, i.e. why we simultaneously perceive the same object; or again, that objects change in the absence of minds, i.e. we find their qualities on successive occasions differing by amounts only to be reached (as our general knowledge of phenomena teaches us) by gradual steps, which steps have had no representative in human consciousness and suggest therefore an unknown substance which is not mind—these difficulties, I say, may be logically met by Berkeley's hypothesis of an eternal and ubiquitous mind. But Idealism of this type seems often to be held in a vague and unphilosophical way by persons of poetical temperament, with whom the all-embracing mind is rather a notion congenial to their religious instincts, than perceived to be logically necessary to the scheme.

By far the most important stage, however, is reached when a person first realises that each feeling and thought is accompanied by definite movements of brain-substance.\(^1\) (It will save trouble to speak throughout as if these inmost nervous processes, which indubitably exist, could actually be perceived by an outside spectator.) As long as you and I were looking at the same object, and our parallel streams of feeling thus closely resembled each other, some hypothesis of action of mind on mind, or of both as reflections of God's mind, might possibly seem to account for the resemblance, without the supposition of an external

In the absence of any knowledge of brain, the same stage would be represented by the recognition of unvarying correspondence between mechanical and measurable facts, such as vibrations, and sensuous impressions or secondary qualities, such as those of colour and sound. But in these days of physiology, all the mechanical facts are at once realised as producing and running up to material changes in the brain; so that it is with this crowning point of the material side of the phenomenon that we naturally associate its sensory counterpart. And I cannot but think that this direct localisation of all the various mechanical counterparts of sensation in one organ, which every one thinks of as a part of himself, and which has obviously had its own material development contemporaneously with the development of consciousness, though it does not logically alter the puzzle of the correspondence, tends to make it far more vividly realisable to those who have not technically studied philosophy,

non-mental reality. But when you watch the object, and I watch (as I may suppose myself to do) the movements of your brain, then each item of your impression of the object, each thing in your consciousness, will have a counterpart in an item of my impression of your brain, which will be a thing in my consciousness: that is, the series of your feelings will present an exact parallelism, without the slightest resemblance, to the series of my feelings. And the total difference of this parallelism of feelings without resemblance, from the parallelism with resemblance when we were both looking at the same object, suggests far more strongly than the latter alone did that the source of the parallelism is external to our two minds. The dawn of this notion I should call the dawn of a philosophical conception of a dualism in mind and matter, as opposed to the unphilosophical conception of externality described as the first stage. That is to say, your brain, with its movements corresponding to yet wholly unlike your feelings, is the sort of matter in respect of which that dualism first presents itself in our day as an urgent philosophical problem.

From what has been said it will readily be seen that, when we speak of 'transcending the duality of mind and matter,' the word 'matter' may signify two very different things. It may signify (A) any and every object in the external world which the senses perceive; or it may signify (B) the physical organisms—in the last resort the brains—of the percipients. the attempts to transcend the duality, which have of course made up a great part of the history of philosophy, sometimes one signification and sometimes the other has been prominent. These attempts may be classified roughly under three heads. Either (1) mind and matter may be kept parallel, as sides or representations of some unity common to both: here matter has usually been contemplated in the A sense, but by Spinoza also in the B sense. Or (2) matter may be put behind mind: here the B sense of matter, has been prominent. Or (3) mind may be put behind matter: here the A sense of matter has been prominent. The actual divisions, however, are far more numerous. The first mode splits at once into three. Thus the unity may be made a substance of which thought and extension are attributes, as in the theory of Spinoza, which however has probably now no single literal adherent. Or absolute substance being rejected,

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the duality may be transcended, as in modern Phenomenism, by regarding the two terms in any external perception as aspects or 'moments' of the same fact, which as in consciousness is mental or subjective, and as in existence is material or objective. Or again, in the conception of the unity as a process in which consciousness and phenomena alike consist in a mutual determination of subject and object, brought about through the one reality of Thought, we have the most popular modern form of Idealism. As thus defined, this last form of the first mode may really be equally considered a form of the third; though to English ears the third mode (as defined by the putting of mind behind matter) rather suggests the older Idealism, which knows nothing of these mutual determinations, but makes the subject merely hold together a series of feelings. And these Idealistic forms of unity further agree in the negative characteristic, that they neither of them recognise the existence and facts of brain as the kernel of the whole problem; they neither of them reduce the general problem of mind and matter to the particular problem of mind and brain, and thus their solutions, however valuable in other ways, leave the prime mystery unsolved. The second of the above three modes. on the other hand, the one which puts matter behind mind, has faced the facts of brain; but the doctrine founded on that recognition has been too crude to deserve the name of philosophy. Its crudest expression of all was the dictum that thought is a secretion of brain; and we find rather a softening of expression than an actual development of idea in the more recent phrase that thought is a function of brain-which would naturally imply that in its relation to the brain it is on a par, e.g., with co-ordination of movements. If all that those who use the phrase mean is that the movements of mind are correlated with nervous processes, they might with equal accuracy, and less chance of misleading, call brain or rather brain-movements a function of thought. But at any rate their position has no claim to be called monistic; the name Dualism, apart from any dogmatic theory, having at least the advantage of keeping the real crux in view.1

<sup>&#</sup>x27;Mr. Spencer and Lewes must be certainly designated Dualists, though the fundamental Dualism in their case is other than that of matter and mind or of physical and psychical events. Mr. Spencer does indeed use the word in the latter sense, as conveniently descriptive of our experience, e.g. when he says that we must 'rest content with that duality of our symbols' (the physical and the psychical, Force and Feeling) 'which our condition necessitates':

We have still remaining, however, another form of the third mode; which, while agreeing with the second mode in its explicit recognition of the facts of brain, agrees with other forms of but he still imagines that mental and neural process may really be 'faces of the same thing,' and his philosophical dualism lies deeper. His radical position as a Realist is that 'Being is fundamentally divisible into that which is present to us as mind' (and this cannot but include nervous processes, which are real or imagined objects in our mind just as much as any other phenomena) ' and that which, lying outside of it, is not mind.' We certainly seem justified in adding, not only not mind, but not even Mr. Spencer's unknown 'substance of mind'; since the substance of mind could scarcely be identified with something 'lying outside of mind.' The above definition of Realism seems thus necessarily to drive us to two unknowns, not the single unknown put forward as a bare possibility in § 63, and as a certainty in § 273, of the Psychology; but either way we equally get a duality, whether between two unknowns or between the known and the unknown. As regards Lewes, it is perhaps easier to show that he ought to have considered himself a Dualist than that he did so. Being far more confident than Mr. Spencer in his identification of 'neural tremors' with feeling, and far less aware of a uniting and permanent something with which no correlation of neural tremors is possible, he is able to hold a large amount of monistic language: but, believing in an objective world which does not arise in consciousness, as including that world, objective to a subject, which does so arise, he equally with Mr. Spencer postulates an unknowable, in the face of which the monism becomes impossible to maintain. For we cannot make the neural tremors a connecting link between the world which does not arise in consciousness and the world which does. The phenomena of nerve-matter, as presented or represented in a mind, must bear precisely the same relation (which, whatever it is, is not identity) to the including extra-phenomenal existence as do any other facts of perception. Mind and non-mind are thus left confronting one another, without their duality being in the least affected by the notion of inclusion.

Idealism in putting mind or something of the nature of mind in the position of sole reality. It has lent itself to development at any rate to this extent, that it has surmounted some of the more obvious difficulties of Idealism, can be represented, in Clifford's words, as 'a necessary consequence of recent advances in the theory of perception,' and can be stated, as he has shown, with a thorough air of scientific precision; his particular statement of it being, I should suppose, by far the most comprehensible and attractive that has yet appeared.

I come now to the argument itself. It is distinctly divisible into two parts. The main aim of the first part is to prove that every bit of what I call matter, even inorganic matter, is correlated with feelings, or rather with 'those remoter elements which cannot even be felt, but of which the simplest feeling is built up,' just as facts of that particular organic piece of matter which I perceive as your brain are correlated with that infinitely complex web of feelings which constitutes your mind; i.e. that in a manner varying infinitely in complexity, but one in kind, all matter is correlated with 'mind-stuff,' just as the most highly

organised matter that we know of is correlated with mind. The proof is briefly this: that I am obliged to infer ejects, feelings of yours, things out of my consciousness, in correspondence with certain sorts of matter (your brain); and as the line of ascent from inorganic matter to the highly organised matter of your brain is an unbroken one. there is no point in the ascent at which I am at liberty to begin to infer facts out of my consciousness; and therefore I must infer such facts, in the shape of mind-stuff of an extremely elementary kind, even at the bottom. This method of proof, I may observe, exactly corresponds with what has been said above—that brain is the sort of matter in respect of which the opposition of mind and matter comes naturally to a philosophic crisis; it is from the observed correlation in this particular case that Clifford argues to every other case, and, starting thence, is led to credit all matter with having some mind-stuff belonging to it. the argument as it stands, it must be objected that what is really correlated with mentation is not cerebral existence, but cerebral change; so that the utmost that we could be led to predicate of inert matter would be potentiality of mentation under certain conditions of change. Clifford would

have replied, I suppose, that there is no such thing as 'inert matter;' that molecular vibration can never cease until heat shall have disappeared from the world. This mode of motion, however, is far removed from those motions of chemical change in the brain which are correlated with consciousness. I do not suppose that any chemist or physicist would assert with confidence that there is a gradual transition from heat-motions, in matter whose chemical constitution remains unaltered, to even simple chemical processes. But at any rate, when we come to organic matter, a chemical peculiarity is found of the most specific kind—the alternations, namely, of waste and repair, the perpetual breaking down and building up of tissue. As this peculiarity begins somewhere, the 'line of ascent' from inorganic matter to brain is not 'unbroken'; and though it might be an assumption to say that change in matter specialised to this extent is the necessary condition of mentation, it must surely be an equal assumption to say that it is not. Yet such an assumption seems essential to Clifford's argument.

The aim of the second part of the paper is to prove that the mind-stuff, which in the first part we have seen reason to think of as going along

with the material object,' is neither more nor less than the reality—not a reality but the reality—of the material object, represented in our minds as that object; in other words, that the Universe consists of nothing but mind-stuff, some of which is, while some is not, woven into the complex form of minds. The words I have italicised will serve to mark at once the point in respect of which acceptance of the first part of the paper contains no ground for acceptance of the second. That every material motion implies an eject, and in that sense that every object we perceive has mind-stuff going along with it, all who can accept the earlier argument must admit. The second part confines all external reality to this external reality; and it is in the independent argument by which Clifford attempts to prove this latter point that my next difficulty lies.

He takes as an example a man looking at a candlestick, and finds in the situation four terms:

(a) the candlestick, an object to me; (b) the 'cerebral image' of the candlestick, i.e. the particular state of man's brain which is correlated with his perception of the candlestick—also a (supposed) object to me; (c) the man's perception of the candlestick, the 'mental image'; (d) the external

reality to which this perception corresponds. These are disposed in the following proportion:—

- (1) The external reality:
- (2) The man's perception of the candlestick::
- (3) The candlestick as object to me:
- (4) The man's brain as object to me.

He then proceeds to say:—'Now the candlestick and the cerebral image are both matter; they are made of the same stuff. Therefore the external reality is made of the same stuff as the man's perception or mental image, that is, it is made of mind-stuff.' The perception, he adds, imperfectly represents the external reality, as the particular affection of brain-matter imperfectly represents, while corresponding point for point with, the phenomenal candlestick.

Now let us substitute, in terms (2) and (4) of the above proportion, my perception of the candle-stick and my brain as object to me, for the man's perception and the man's brain. The primâ facie objection to this substitution, in that I cannot at the same moment have the candlestick and my brain as an object, has no real validity. Practically, of course, I can no more examine the man's molecular processes than I can my own: but as I know

they go on, and could be fully described and delineated were the physical means of examination adequate, I am at liberty to suppose myself witnessing them in the case of his brain; and as regards my own, nothing more is wanted than that, since the candlestick itself and my brain as I watch it cannot even be supposed to be objects to me simultaneously, my brain in that condition shall be an object subsequently represented to me, e.g. by accurate descriptions and diagrams. So the proportion will become:—

- (1) The external reality:
- (2) My perception of the candlestick::
- (3) The candlestick as object to me:
- (4) My brain as object to me.

But (2) and (3) are now identical; so that the neatness of making out the two first terms to be of one kind of stuff, and the two last of another, is found to have depended on the mere artifice of imagining two people to be concerned instead of one.<sup>1</sup> If it be replied that it is not necessary for Clifford's illustration that the two first terms

<sup>&</sup>lt;sup>1</sup> Clifford has himself turned the third person into the first, apparently without noticing the effect on his argument. He then arranges and words the proportion thus:—

should be of different stuff from the two last, the answer is obvious. If the relation between the external reality and the candlestick as object to me is the same as that between two things, (3) and (4), which are objects to me, then for me the external reality is itself an object and not an eject—which is absurd.

But examining further into what is implied in the proportion, we find more than this to complain

The physical configuration of my cerebral image of the object: The physical configuration of the object::

My perception of the object (the object regarded as complex of my feelings):

The thing-in-itself.

Here the first term (which in the former case was the fourth, the order having been inverted) = My brain as object to me; and the second term (which in the former case was the third) = The candlestick as object to me; so that again the second and third terms are identical, as in the proportion in the text. The wording, and especially the clause between brackets, tend greatly to conceal this fact; but a moment's thought makes it clear that the 'physical configuration of the object' is my perception of it, including all the items of impression of which that perception is made up; and the 'complex of my feelings' is merely the complex of these same items. The latter phrase unfortunately suggests, beyond the mere perception of the object, the various ideas and associations which may be connected with that particular object, and hence gets an unwarrantable appearance of meaning something different from the 'physical configuration.' The existence of such ideas and associations is clearly quite irrelevant to the argument: it is just a chance of my individual experience; and I may substitute for the candlestick an object perceived for the first time, in connection with which I had no previous ideas and associations.

of. The things in terms (3) and (4) are inter-dependent: for whatever the mode of relation may be, we have no evidence that perception of an object can take place without corresponding brain-affections. Carrying then this interdependence into terms (1) and (2), I have to say that the it, the external reality with which I can never come in contact, is dependent on my possible perception of it; and also that my mind depends for a mode of its being (for my perception of objects is a mode of being of my mind) on that whose essential character it is to be for ever outside it. And the question then occurs how, quâ mind-stuff, I could ever become aware of its existence?

Clifford's answer is that it is represented in my mind. The word must not conceal the fact, which the proportion makes evident, that mind-stuff is made to act on mind-stuff as object acts on object, e.g. as candlestick acts on brain-matter. Now object can act on object, or (in the ordinary phrase-ology) the presence of the candlestick causes certain affections of my brain, because both candlestick and brain belong to the phenomenal or objective order, i.e. to an order of things which are comprisable in my single mind, and among which I find universal relations of sequence and coexist-

ence, conveniently expressed by words like cause and law. And the stretch of imagination to conceiving similar relations as existing between my mind and a reality external to my mind is, of course, a vast one whatever that reality may be, and is disguised but not diminished by calling the mode of relation or action representation. But the view which refuses to what is 'represented' as matter any other reality than that of mind-stuff introduces a difficulty wholly of its own. suppose all matter to become highly organised, and by a parallel process all mind-stuff to become woven into minds (this being obviously a quite allowable hypothesis, since the validity of Clifford's argument does not at all depend on whether some of the mind-stuff in the Universe does or does not remain in an elementary condition); or if it be thought simpler, imagine that the amount of reality in the Universe is reduced to two minds. Each of these, then, is represented in the other as a material brain, an object of which we may suppose them (as we have supposed ourselves throughout) to have complete means of per-But as a mind, at any rate according to Clifford's view of it, is its contents or perceptions for the time being, each of these perceiving minds,

according to him, would be a material representation of the other: therefore each would be a material representation of a material representation of itself. But to call this reality is surely to try to get visible content into two mirrors facing one another in empty space: or, on the supposition of a multitude of such minds, into a universe of mirrors. Such a universe would be as truly empty as if there were only one mirror—or one mind—when, on Clifford's principles, all chance of representation and so of reality would be over.

It may seem at first sight as if I had here forgotten my claim to know my own brain-movements as objects; and as if a universal mind, correlated with a brain which was a material representation of the Universe, might pass a reasonably good time in contemplating that remarkable organ. But such a view assumes the possibility of watching the brain-process correlated with the very act in which it is itself watched. Now this I must maintain to be strictly inconceivable, if the one is the condition of the other; and in the supposed case, at any rate, no further condition could exist, as it would have to be outside the Universe. The meaning of condition would disappear if each moment's watching could either 'condition' or 'be

conditioned by its own content; and the idea of an anima mundi, or a material universe throughout self-conscious of its own changes, whatever it may be worth, can never be reached from cerebral analogies. It is worth noting by the way that even if such a process were conceivable and possible, it would probably not be agreeable. The increasing scope and complexity of mind is conceived as strictly parallel with the increasing scope and complexity of brain. I am justified therefore in supposing that if I attained to a universal mind, and if my brain were the Universe, I should find its movements as ugly and boring a spectacle as if I now watched my present brain working under a microscope.

Though the objection just made can be more simply stated on the supposition that no mind-stuff is supposed to remain in the uncombined and elementary condition, but that all there is is fitted together into the texture of perceiving minds, yet when the objection has been once

¹ If immediate and absolute self-representation is impossible for a materially-conditioned intelligence, clearly no reality can be extracted from it for that mediate representation which we were just before imagining as reflected from each to the other of two semi-universal minds, each of them correlated with a brain that materially represented half the universe. I believe therefore that the metaphor of the empty mirrors is strictly correct.

granted on this supposition, it is easily seen to be equally applicable to a universe in the condition that Clifford describes. For by the undoing of some of the superfluous minds we have imagined, and the reducing of their elements of feeling to the uncombined state, by the withdrawal, that is, of their power to represent, we should clearly not be endowing them with any additional reality or power of being represented; to destroy them as mirrors cannot be made to give them the necessary opacity of objects, without reinstating about as marked a distinction between mind and matter as the old one which Clifford is anxious to transcend.

This difficulty of getting objective content into the Universe shows itself equally strongly in a portion of Clifford's paper which has not yet been mentioned—his doctrine of the gradual development of conscious minds through the interweaving of elements of mind-stuff. On his theory, a single unit of mind-stuff is a thing-in-itself: it would be equally real were there nothing besides itself in existence; since for that which is far too elementary to perceive objects, it could not matter that there were none to perceive. As the units gradually combine, however, there result minds, i.e.

existences which cannot be conceived without objects; and the puzzle is to get, out of a universe of mind-stuff units, the means of identifying or connecting the process of independent combination of some of them into minds, in which objects are an essential part, with the representation therein of others, which do not enter into the combination. as these objects. For simplicity's sake, let us say that a mind results from the interweaving of elements A, B, and C; and let D stand for external bits of mind-stuff. Now a mind is not first made and then provided with perceptive contents; the process of formation is a process of getting such contents, a process of developing perception of objects. Thus Clifford's interweaving of A, B, and C, things-in-themselves wholly independent of D, must yet depend throughout on the existence of D, and the product is not merely a means of representing, but an actual representation of, this external existence; that is, things which have no relation to a reality outside them can only combine in virtue of that reality, and in combining become that relation. In other words, from the piling together of units which for reflecting purposes are so many lumps of lampblack, there gradually results not only a mirror,

but a mirror which reflects the wall on which it hangs.

It should be remarked how utterly different is the difficulty here from that involved in the simultaneous development of nerve-matter and consciousness. In that simultaneous development, however inexplicable it may be, we have at any rate an interdependence of one definite order of events with another definite order of events. In Clifford's universe we have an order of events, the interweaving of mind-stuff units, depending on something which is not an order of events at all; a progressive establishment of relations, made possible through, and issuing in a representation of, relationless elements described by him as far simpler than the simplest feeling, and stationary therefore in the same proportion.

My criticisms so far have been concerned with the *object*, both in itself and in its relation to the gradual formation of minds. But Clifford's account of the *subject* seems open, on its own account, to equally grave objections. He considers that the sense of a uniting personality is not given in the actual moment of feeling, but in subsequent reflection; and 'consists in the power of establishing a certain connection between the memories of

any two feelings which we had at the same instant.' At the instant, a feeling exists an und für sich, and not as my feeling: 'but when, on reflection, I remember it as my feeling, there comes up not merely a faint repetition of the feeling, but inextricably connected with it a whole set of connections with the general stream of my consciousness'; and this memory again, so far as it is itself a feeling, is absolute, Ding-an-sich. 'The feeling of personality, then, is a certain feeling of connection between faint images of past feelings'; personality is 'the property of the stream of feelings that part of it consists of links binding together faint reproductions of previous parts.'

The metaphor of the complex stream, or of interlacing strands, is convenient; but the true metaphor for a combination of elements each of which is a Ding-an-sich must surely be a rope of sand. All the phrases used to describe the mode of complication lie open to Green's pitiless indictment of the modern empirical psychology, in assuming the unifying consciousness which they profess to account for. How can I remember anything as my feeling, in the absence of a unity which is neither my past nor my present state, but which by its persistence gives a ground for their

relation? Does not the very word remember express the whole vital difference between a feeling and the fact that I had a feeling? Again, this unity certainly does consist partly in 'the power of establishing a certain connection' between the memories of simultaneous feelings; but how is this connection to be got out of the separate feelings which it connects? Still more, how is it possible to call such a link itself a feeling, a member of a stream of feelings? Granted that we can experience a 'feeling of relation,' the peculiarity of the consciousness of this is that it witnesses to a fact not comprisable within the moment of the experience. How can that fact—that condition of the relation—be one of the relateable terms?

And this difficulty of getting a unified consciousness, which consists in the perception of a world of facts or relations, from any manipulation

¹ A similar objection might of course be urged from the side of brain; the perception of brain-processes being as dependent on a persistent subject as any other order of facts. A less obvious but equally valid argument is this; that such brain-movements as are correlated with feelings would not be thought of as a unity or a complex at all, except through a latent pre-supposition of that unity of consciousness which the correlated feelings are supposed to constitute. I could as much get the unity of complex interweaving from the movements of motes in a sunbeam as from the mere juxtaposition, in the space of your brain, of a number of separate occurrences, sequent on a number of separate sorts of external stimuli.

whatever of unrelated feelings, naturally suggests a reconsideration of the argument which attributed the elements of feeling even to inorganic matter. on the assumption of the continuity of the elements of feeling with developed consciousness. The argument, it will be remembered, was, that I find a continuity in matter from the elaborate combinations in your brain, in association with which I know that ejects or facts out of my consciousness exist, down to the simplest inorganic forms; when then I trace the chain of matter upwards, it seems impossible to say at any particular point, 'Here ejects begin-here I may begin to assume the existence of facts out of my consciousness, in association with the matter which is an object in my consciousness'; and the alternative is to assume a parallel continuity of ejects in association with all matter down to its simplest forms. Clifford does not tell us how he found his way below simple feelings, or by what right he assumed that 'the simplest feeling is built up out of remoter elements which cannot even be felt,' or what sort of reality he attributes to elements of feeling which are out of relation to a consciousness, and are not determined by even so elementary a relation as that of sequence. But even if such

elements exist, their nature is wholly unknown to us; and the continuity, if it exists, is only of things qua ejects, of things as determined solely by the fact of being out of my consciousness. Now the quality of ejectivity, common to the 'mind-stuff' elements of a stone and to the mind correlated with your brain, clearly need not imply the possibility of a combination of one into the other which Clifford has assumed. We might therefore grant the stone its ejectivity, without granting that 'reason, intelligence, and volition are properties of a complex which is made up of elements themselves not rational, not intelligent, not conscious.' But we should then be leaving the cardinal problem of consciousness just what it has always been. and totally untouched by Clifford's theory. Somewhere in the chain, as he admits, consciousness appears for the first time: the evidence is too strong to admit of this being carried down to the bottom. And to say at any particular point, 'Here consciousness, i.e. a sense of relations, begins' is only rendered less startling than to say, 'Here ejects begin,' by the assumption of the continuity

<sup>&#</sup>x27; If I compare the external reality of the stone not with your mind but with mine, even this common quality of ejectivity disappears, and I am bidden to call 'mind-stuff' that of which not a single quality of mind, positive or negative, can be predicated.

of one with the other; the assumption, that is, of relations set up by and among things of which the primary hypothesis is that they are excluded from relations. Nor can the difficulty be in any way evaded by dwelling on the gradualness of the development of consciousness. The very first time that any creature perceived a change from one feeling to another, an event had occurred which is as strong an argument against Clifford's account of mind-formation as any that could be brought from the mental workings of a Shakespeare or a Newton.

The question here discussed is, in Clifford's words, 'one in which it is peculiarly difficult to make out precisely what another man means, and even what one means oneself.' Nevertheless his exposition is so characteristically lucid that it is difficult to imagine one has mistaken his meaning: and the very fact that not a tithe of the ingenuity that went to the propounding of the doctrine is necessary to the discovery of its flaws is, I think, suggestive in relation to the whole subject of Monism, in respect, at any rate, of its profession to face the brain-difficulty. From its earliest appearance in the system of Spinoza, down to this latest

and most plausible shape which it has received from an eminent man of science, such Monism has had the air of being par excellence the scientific theory of the Universe; and it is the emphasis which has been given to this notion in recent criticisms of the earlier form of the doctrine, that led me back to the difficulties I had found in the later one, and to a reconsideration of the general validity of the claim. There is not wanting, however, a more special connection between these two particular aspects of the Protean doctrine, amounting indeed, according to these recent views, to a vital affinity; for Prof. F. Pollock, in his truly admirable work on Spinoza, has indicated the mind-stuff theory as really latent in Spinoza's system, and as what Spinoza himself would have arrived at, 'if he had not been unconsciously haunted by a remnant of Cartesian dualism.' And this position may be first briefly examined.

One point of identity must certainly be conceded: Spinoza does indisputably conceive of something of the nature of mind as going along with all extended matter. But this piece of agreement cannot annul other points of the system which seem fatal to that 'latent idealism' which Prof. Pollock extracts from it. This 'latent ideal-

ism,' which, once established, is enabled by the above positive conception to take a mind-stuff form,' is itself arrived at by a negative route. In some admirably written pages, Prof. Pollock proves that all Spinoza's attributes except Thought are superfluous; but instead of treating this as a refutation of Spinoza, he modestly insists on giving Spinoza the potential credit of the refutation.

In the course of his statement of the mind-stuff theory, Prof. Pollock uses one argument not used by Clifford, and worthy of notice as suggesting an objection which will reappear further on, that Science and Metaphysics are not quite the same thing. He argues that the unknowable substratum of objects must be of the nature of mind on the following ground:-that there is one peculiar kind of unknowable which is undoubtedly of that nature, viz., other people's minds (the existence of which is for each of us a matter of inference, not of immediate knowledge), and that it is unscientific needlessly to multiply causes and conditions; so that this recognised mediately-known sort of unknowable may and must do duty for the reality, also unknowable, divined as underlying phenomena. I do not know that any direct or precise argument can be brought against the validity of this reasoning; but I cannot but think that we should be foisting some element of the known into the unknowable even in the act of supposing it valid. The hypothesis of an unknowable non-mental substratum of matter may be attackable in other ways; but it goes too deep to be seriously affected by a likelihood of parsimony in unknowables The argument of parsimony has its origin and its force in our experience of physical conditions and efficient causes on the plane of the knowable, where the conditions are modifiable and the superfluous causes get eliminated by degrees: it can hardly seem convincing against an hypothesis, suggested on independent grounds, of a mode of being which, as absolutely unmodifiable and unknowable, is not more likely than unlikely to be identical in substance with another unknowable.

The proof is unanswerable; and we may amuse ourselves with supposing that, had Spinoza been one of our contemporaries, he would have appreciated, and might even himself have supplied, the argument. But such suppositions can hardly be seriously read back into the philosophy of a past age. We readily grant that, if any one is born into a philosophical epoch which is not dominated by Cartesian dualism, he runs a good chance of not being haunted thereby; but to speculate what Spinoza's line of theory would in such a case have been seems rather like speculating what sort of person one would be oneself if one had had some one else's ancestry. The data are too vague and too inextricably intermixed; it is always a little too easy to take the particular elements in a philosopher which can be seen to lead to a consistent development, and to ascribe to these a central position in his mind, of which he himself gives no indication. At any rate, when we go to Spinoza's actually stated scheme, with all its patient elaboration of construction and undoubting confidence of tone, we find elements, impossible to treat as accidents or excrescences, which are stubbornly inconsistent with the position represented by Prof. Pollock as almost within his grasp; so much so,

that that position (if I may hazard a guess) would have caused him quite as much surprise as any other modern form of Monism; so much so, I may even say, as to preclude any confidence that, had his life been miraculously preserved, he would now be in agreement with Clifford rather than with Mr. Spencer.

Thus, in the very proof to which I have reterred, of the superfluity of all the attributes except Thought, Prof. Pollock necessarily points out the entire mutual independence of Spinoza's attributes; and this obviously involves the conclusion that Extension could exist (it is for Spinoza to say in what manner) if the independent attribute of Thought were eliminated, just as much as it involves Prof. Pollock's conclusion that Thought (including the perception of things as extended) could exist if the independent attribute of Extension were eliminated. In Prof. Pollock's own words, Spinoza 'would never have admitted that the material world is extended only in respect of our perception.' The same contradiction of Idealism reappears in the consideration of God. Though Spinoza's God is a thinking being who can think infinitely in infinite ways, Prof. Pollock has expressly remarked how he is 'not exclusively or emi-

nently a thinking being,' any more than man is, who is corporeal and extended just as much as thinking. Everywhere there is the same irreducible and independent parallelism of Extension and Thought, of the untenability of which Prof. Pollock himself would have convinced me, had I needed convincing: my difference from him lies simply in my holding that the parallelism must be reckoned as belonging not to the accidents but to the essence of Spinoza's philosophising; that the flaw, however much at the time inevitable, is too radical for one to judge of how Spinoza's mind would have worked, or what his system would have been, without it.

Nor can I follow Prof. Pollock in crediting Spinoza with any sort of anticipation of modern Idealism even in the single respect of rejecting the unknowable. Prof. Pollock's own view is that 'it amounts to a contradiction in terms to speak of "unknowable existence" or "unknowable reality" in an absolute sense,' and that existence must be identified with 'the possibility of being known and perceived'; and he is fain to find this view in his favourite philosopher, of whom he says that 'there can hardly be a reasonable doubt that for him to exist and to be intelligible were all one.' For

Spinoza to exist and to be intelligible have not always been found all one by his readers. But, flippancy apart, while the idea in Prof. Pollock's mind is perfectly clear, in Spinoza's mind it was, even if present, mixed up with what amount to total contradictions of itself: and this fact has not. I think, been exactly brought out in Prof. Pollock's very felicitous account of the particular difficulty in the system with which it is connected. The difficulty is the old one propounded by Tschirnhausen. The attributes being infinite in number, and an attribute being 'that which the understanding perceives concerning substance,' how is it that our understanding perceives (beyond itself) only one of these attributes, viz., extension? Spinoza's answer, as simplified by Prof. Pollock, is that 'every mode of every attribute other than thought has a several mind or modification of thought to itself,' so that 'the modes of thought' (i.e. in this connection not minds, but sorts of mind, called here by Spinoza infinite ideas) 'are numerically equal to the modes of all the other attributes together.' But Spinoza says more than this: he says, and the consistency of his system demands that he shall say, that these modes of thought other than our mode or mind, and corresponding to other attributes than exten-

sion, 'have severally no connection among themselves.' In other words, these various 'modes of thought' are as different and unconnected among themselves as the disparate and self-complete attributes correlated with them; they are not related in the least as my thought to your thought; and their contents are unable-not only actually but essentially unable—to exist in our mind, standing to it in a totally different relation, e.g. from that held by the world of sound to a man born deaf.1 Are we then justified in calling them thought, merely in order that esse may still verbally = percipi? Our thought, from its simplest to its most complex manifestations, is a connected whole of a certain kind: to postulate something else of another kind and call it thought, for the sake of accommodating the unknowable with a possibility of being known, is merely to shift the bugbear of unknowability from the object to the

¹ It is perfectly true, as Prof. Pollock says, that 'we can conceive, though not imagine, relations of thought to other worlds, analogous to those which we perceive between thought and extension.' Such another world of unumaginable objects might be exemplified by the world of sound in relation to the thought of the deaf man. But it seems to me even more impossible to reduce what Spinoza has actually said to anything like this than to make out that his explanation, were this its meaning, would be consistent or adequate.

subject. The difficulty of saying with Mr. Spencer that an unknowable object exists, cannot be evaded by saying that the object in question, unknowable to us, is knowable by a 'knowledge' which has no relation to what we call knowledge, by that therefore of which all we have a right to say is that it does not know.

Even Prof. Pollock seems to consider 'an intelligence other than ours,' and 'consciousness not analogous to human consciousness,' as legitimate expressions; but that they should seem legitimate in the sense which Spinoza's theory demands is simply owing to an ambiguity of language. We are familiar with the idea of an intelligence similar to but indefinitely transcending our own in power and knowledge: percipi may be quite fairly translated 'possibility of being known and perceived,' in a way which allows the North Pole, or even the molecular movements in the centre of Sirius, to be ' included in it just as much as the paper I am writing on. But the sense is totally changed if the supposed 'possibility' is not just an increase in the content and scope of those affections which we call perceiving and knowing, but involves the assumption of affections, still called perceiving and knowing, which have no relation to our affections; and

only through this tacit passage from an intelligence other than ours in the sense that Newton's was other than mine, to a verbal figment which professes to retain in some way the substance of knowing while dispensing with all its predicates, is it possible to claim for Spinoza the credit of discarding the unknowable. Such an abuse of words would be quite parallel to the familiar moral fallacy of calling God good, while refusing to apply to his supposed actions and purposes the criteria through which alone the idea of goodness has been established.

So much, then, for the relation of Spinoza to his putative metaphysical offspring; as regards which, so far as I may have differed from Prof. Pollock, I have done so by the aid of his own admirably candid and lucid exposition. As regards the more general question of the scientific character of Monism, as represented in Spinoza, I feel that the difference lies deeper. Prof. Pollock's treatment of this topic seems to me, indeed, almost the only real blemish in his brilliant work; and the same remark applies to the review of that work by one, at least, of its ablest critics, Mr. Leslie Stephen.<sup>1</sup> Prof. Pollock sums up his account of

<sup>1</sup> In the Fortnightly Review for December, 1880.

Spinoza's monistic theory, in its bearings on the problem of the connection of brain and mind, as follows:—

Not that his metaphysical principles are in themselves unable to furnish means of dealing with the problem : on the contrary they very much simplify it. The puzzle of sensation, when considered in the usual way, is that there is a relation between the heterogeneous terms of consciousness and motion. Something happens in my optic nerves, physiology may or may not be able to say exactly what, and thereupon I see. Can my sensation of sight be said to resemble the thing seen, or the images on my two retinæ, or the motions in the optic nerves, and if so, in what sense? These questions are essentially insoluble on the common supposition that body and mind are distinct substances or orders in rature. If body and mind are really the same thing, the knot is cut, or rather vanishes. The problem of making a connection between the inner and the outer series of phenomena becomes a purely scientific one. It is no longer a metaphysical paradox, but the combination of two methods of observing the same facts, or facts belonging to the same order; and the science of physiological psychology can justify itself on philosophical grounds, besides making good its claims by the practical test of results. . . . On Spinoza's principles, to ask why mind should correspond with matter is like asking why the convexity of a curve should answer to the concavity.

## On which Mr. Stephen remarks:-

If Spinoza's way of putting this is not satisfactory . . . he grasps the true difficulty and understands the conditions

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of a satisfactory answer. . . . He strikingly anticipated the general tendency of modern thought in regard to a problem which we must admit to be still unsolved. . . . Till language has been brought into conformity with philosophic thought, all attempts to express the undiluted truth must be more or less failures.

Such language seems to confound the aims, methods, and possibilities of Science with those of Metaphysics. The unity and continuity of Nature, which it was Spinoza's great merit to have grasped, is a unity and continuity of things in my consciousness-objective phenomena, in the everadvancing knowledge of the relations of which the conception of unity and continuity is ever becoming more full and complete. If I had been placed in chaos, with powers the same in kind as I actually possess (i.e. the power of knowing an objective order), but infinitely increased in degree, so that I could have deduced the whole chain of evolution down to the formation of brains, I could have had not the faintest prophetic inkling of the dawn and development of any consciousness ex-If at this moment I knew ternal to my own. intimately every idea and feeling of every mind in existence, and every inmost and minutest nervous process which accompanied each, my knowledge of the infinite number of facts in which the paral-

lelism was displayed would not go a single step towards establishing for my mind a unity or continuity between what I can or might perceive, the nervous processes in other people's brains, and what I can never perceive, the accompanying feelings in other people's minds. Or, to put it more generally, if such minute knowledge became universal, it would not go a step towards establishing a unity or continuity between physical facts, perception of which can be shared with all the world. and psychical facts which are essentially unshareable. Even putting other minds aside, however completely I realise that all phenomena, and so brain-movements as much as any other, are mental facts, and that in that sense 'body and mind are really the same things,' I get no whit nearer to understanding the strict dependence of all other mental facts on that one limited set of mental facts. Unity is out of the question. I should only get unity between my own perceptions and my own brain-movements in the case, described above as inconceivable, of watching the actual brainmovements that accompanied the act in which they themselves were watched.

The issue is really so simple that an attempt to show that the problem is solved or ultimately

soluble is liable to suspicion just in proportion as it is complicated and hard to follow. No conceivable process or progress of thought can get behind the fact that whether two things, known as distinct (such as brain-movement on the one hand and any other fact, objective or ejective, on the other), can be further known to be sides or aspects of one thing, depends on whether the knower's position relatively to them can be altered. And in the present case, the multiplication of these pairs of distinct though correlated facts, is not such as brings with it any possibility of that alteration of conditions which is so prime a factor of our experimental knowledge: it is a mere blank and unmodifiable parallelism of lines whose parallelism and consequent inability to meet is their sole knowable relation. The difficulty therefore is not met but masked by the convenient words aspects and sides; since these receive their only meaning from their application to perceived objects, with regard to which position can be altered and conditions variously modified. And the curve simile, so far from being helpful or approximative, is radically delusive. For if we take a concrete case, where it is possible to regard the convexity and concavity of a curve as two distinct but corresponding things,

e.g. the surface of a rounded body accurately enclosed in a removable covering, the convexity and concavity present the closest resemblance in several respects: thus the arcs subtending their corresponding portions are identical, and the gradation of curvature of each at each corresponding point is identical. This illustration therefore, and any analogous one, must necessarily suggest just that essential resemblance of the corresponding terms, the entire absence of which is the distinguishing characteristic of the case supposed to be illustrated.

Yet it seems, according to Prof. Pollock, that one need only state body and mind to be the same thing, or aspects of the same thing, to have the right to consider that the problem has become practical instead of theoretic, and that the registration, not the existence, of the correspondences of brain and mind is henceforth the only thing we need exercise ourselves about. A problem is doubtless simplified by ignoring all that makes it problematic. The assumption of that which we can never know may leave us with delightfully unpuzzled minds for recording that which we have never doubted; but that is the only sense in which it could 'furnish means of dealing' with anything.

If then, in saying that 'physiological psychology can justify itself on philosophical grounds,' Prof. Pollock means that the accurate observation of the synchronous changes of nerve-matter and consciousness is more justified as an intelligent pursuit by a 'philosophical' and unprovable assumption put behind it, we reply that it stands as little in need of any such justification as the study of chemistry or botany. If he means that attention to that branch of experience justifies itself as tending to confirm a monistic solution of the philosophical difficulty, we reply that experience of two orders can never come any nearer to being experience of If in saying that Spinoza 'understands the conditions of a satisfactory answer,' that 'the problem is still unsolved,' and that the truth cannot be expressed 'till language has been brought into conformity with philosophic thought,' Mr. Stephen means that the difficulty is being gradually sapped, that the problem is one admitting of approximative solutions, he surely fails to recognise that all materials for approximate solutions are wanting; that the riddle is not one in respect of which facts can be discovered and evidence amassed, but remains perfectly isolated and ultimate, without a single avenue leading to it or from it. For psycho-

logical observation, for tracing the evolution of consciousness on the one hand and of the physical organism on the other, ample materials exist: but psychology and evolution, if every fact relating to both were at this moment known, would not bring us an inch nearer to adjusting the claims of Monism and Dualism. Spinoza failed, not because he was the rough-hewer of a comprehensive idea which needed the labours of many other workers for its perfect elaboration, but because his idea contained no sort of workable stuff. To extol his metaphysical position as an extension of the view of the unity of Nature, is to extol it for precisely that wherein its weakness is manifested—the effort namely to get from a doctrine whose whole force lies in experience a momentum which should carry it beyond the confines of experience.

It may be noted, moreover, in passing, that Prof. Pollock seems to make rather too much of his text, both as to the extent of the discoverable connections between physiology and psychology, and as to the bearings of those connections on the latter science. A propos of Spinoza's firm grasp of a parallelism of complexity between body (Spinoza would now doubtless have said brain) and mind, he remarks that 'there could not be a

more distinct or positive declaration of the necessity that psychology, if it is to be a serious branch of scientific enquiry, shall go hand in hand with physiology, and verify its results, as far as possible, by physiological observation.' It seems to me that Spinoza's own case is enough to refute the view as thus stated; for his numerous and admirable psychological observations certainly demanded no physiological knowledge. A firm grasp of the general fact of the invariable correspondence between nervous and mental processes means something quite different from imagining that we know or ever can know the parallelism in detail, or that in this sense the studies of the two sets of things can 'go hand in hand.' Did every step in psychology depend on exact knowledge of physiological counterparts, psychology might have waited for ever: fortunately, however, there is nothing to prevent its being made an exact study on its own account, a possibility which we might safely affirm even were it not in course of being rapidly realised. Our knowledge of the physiological counterparts, on the other hand, is, and seems destined to remain, of a comparatively rough and rudimentary sort. The gist of the matter lies in ultimate nervous processes which are of course utterly

beyond our reach. But, putting molecular motions aside, the broadest facts, the most elementary functions of the various parts of the cerebrum and the part played by them in connection with the simplest perceptions and volitions, are still matters of dispute; while even the most general physiological translations of psychological laws (e.g. the limiting and differentiation of areas of nervous discharge, corresponding to increasing definiteness of perception), are rather reasonable hypotheses than results of experiment. Nor do I see how such principles, however interesting as matters of knowledge, can be truly said to 'verify' or in any way affect the psychological facts which must necessarily be observed quite independently.

I am, of course, not charging either Prof. Pollock or Mr. Stephen with imagining Spinoza's form of Monism to be demonstrable or even probable; but they both seem to regard his attempt as in the right line—as containing a germ likely to fructify, and parallel with the ideas which draw ever fresh certainty and vitality from fresh experience. They both seem to class Monism as one of the instances—a Triton among the minnows, of course, but still belonging in kind to the instances—in which the unity of Nature, if not yet

absolutely established, at any rate ought to commend itself as a scientific truth to persons with clear heads and a sense of analogy; and they thus look on Spinoza's theory, however faulty in detail, as corresponding to the general tendency of modern scientific thought. I should have said, on the other hand, that modern scientific thought, in its cruder forms, had simply ignored metaphysics: and in its more intelligent forms, had clearly recognised that the radical distinction between brain and mind can as little be bridged over by the multiplication of correspondences as by the bold assumption of a common substance. And as among monistic systems Spinozism has no superiority in the way of connection, so neither has it any superiority in the way of compatibility, with the teachings of Science. Pure Idealists and pure Phenomenists may accept those teachings to the full; and if they leave the brain-and-mind riddle unanswered, it may be because they perceive 'the conditions of a satisfactory answer' to be unattainable. So little is a 'unity of nature' in metaphysical tendencies a scientific postulate. Indeed the only hope, a forlorn one as I have tried to show, of establishing a special claim for Spinoza seems to lie, after all, in definitely connecting him

with the mind-stuff theory; which has a truly scientific character in its emphatic recognition of the essential distinction of object and eject, and of brain as the object at the centre of the difficulty; and which at any rate is remarkable as being at present the one form of Monism, dealing explicitly with brain as well as thought, which possibly might be claimed as answering to the prophecies hinted by Mr. Stephen, or as justifying us in feeling with Prof. Pollock that the time-honoured crux is henceforward reduced to scientific questions of physiological psychology. I was surprised therefore to find no more explicit mention of Clifford's attempt in that later treatment of the monistic position in juxtaposition with which I have here presented it; for it at all events professes to do that to the doing of which Spinoza has been represented as pointing the way. But on the one hand, the questions with regard to it which have been here raised seem to need answering; and on the other hand, the fact (if it should so turn out) that they indicate flaws, is not more suggestive of the hopelessness of dogmatic Monism, than the consideration that this latest and most scientific form of it might really be equally claimed as a theory of Dualism; the admission of

absolute existences below the level of consciousness seeming, as we saw, to reintroduce the old duality of knowable and unknowable under cover of the so-called mind-substance.

The efforts of Philosophy to escape from Dualism are likely to continue; but I venture to predict that, if they are ever crowned with success, whether in this or in some future stage of our mental evolution, it will be not by anything akin to Monism as hitherto taught, but by an at present unguessed *Tertium Quid*.

## NOTE ON THE ORGANISM IN RELATION TO PERCEPTION.

IN a little book which has been less noticed than it deserves -the late Dr. Ingleby's Introduction to Metaphysic-a bold attempt has been made to explain the bodily organism, and its relation to perception, on Idealistic principles-or at any rate on principles so far Idealistic that they represent the subject as constructing his own object. Dr. Ingleby's view is that perception is construction, the real process being the exact reverse of the apparent one, in which we seem to be simply passive and receptive. We seem so just because of the perfection of our activity-because we are acting wholly without friction or resistance. Now given that I do represent an external world, that I shall seem to stand in a merely receptive relation to it, that it shall seem to come back on . me as object perceived rather than as object constructed, it follows, he argues, that part of the construction must be a mode of receptivity-something whose function it will be to

mediate the representation of objectivity: 1 and he identifies this mode of receptivity with the organism. And as my representations partly consist of objects in space, my mode of perception will have to be consistent with that relation: whence is deduced an extended and sensitive organism, the differentiation of part of which into nerve-tissue and a central organ of perception would present no special difficulties. In other words, for me to find myself in a phenomenal world, I have to clothe my self-consciousness homogeneously with My organism represents phenomenally the real that world. internal constitution of my Ego, its inherent machinery for turning out its effects—those effects being the phenomenal world in which it seems passively to find itself, but which it really constructs under the stimulus of sensation derived (according to Dr. Ingleby) from a real transcendental Non-Ego. And as the brain thus represents an actual process of the Ego, its movements, though they tell us nothing as to the nature of the process, must naturally correspond with it.

On this view, it will be seen, Idealism would be unintelligible and impossible unless percipients had bodies; and the very fact of the correspondence of perception with nerve-processes, which has been represented in the above Essay as the insoluble problem par excellence, appears as a matter of logical necessity. In spite, however, of the attractive neatness and simplicity of the doctrine, it is to me wholly unconvincing.

I should first ask—If the Ego, in order to construct objects, must first construct a mediating organism, which organism is itself an object, how does the Ego construct it? A thing cannot

<sup>&</sup>lt;sup>1</sup> These phrases and others in the present note are borrowed from an (in part unpublished) exposition of Dr. Ingleby's theory by Mr. C. C. Massey.

well mediate the representation of itself. But even if this objection could be met, it would bring us no nearer to proving the necessity of such a construction—to proving that a mode of existence which is subjectively sensitive, is, ipso facto, objectively sensible, an organism which others can perceive. Our own organisms being undoubtedly there, it is a temptation to ingenuity to deduce, instead of simply acknowledging, that they had to be there; but if 'disembodied intelligence' could be proved, if some being could make us aware that he perceived us without our being able to perceive him, I doubt if it would have occurred to any one to deduce an organism for him from the mere fact of his perception. The argument seems to identify the two relations which are really fundamentally different, though most unfortunately, as we have seen, they equally admit of being represented as the 'relation of mind to matter,' and as exhibiting the one as the 'other aspect' of the other. They are :-

- (A) The relation of my perception—say, of the lamp—to a corresponding change in that which makes others aware of my existence, namely, my organism; a relation only comparatively recently discovered; a relation for subsequent reflection; which has the same existence for you as for me; and which for you (in Clifford's phrase) is a relation of eject to object.
- (B) The relation of my perception of the lamp, quâ mine, to the lamp as perceived—the relation of me determined to that which appears to determine me; a relation involved in the immediate act of perception; which exists for me only; and which is a relation of subject to object.

To the second of these two relations the antithesis of sensitive and sensible applies as a matter of logical necessity. To the first it does not so apply; for the mere fact that I am sensitive does not in itself imply that I have any means of

making others aware of my existence. Thus, while it is true that my mode of existence must be conceived both objectively as sensible and subjectively as sensitive, its objective aspect is the lamb for me, not my organism for you. It is, of course, in a mode of existence conceived objectively as sensible, and ejectively (by others) as sensitive, that we have our chance (or one chance, for others are conceivable) of finding ourselves in a universe peopled by fellow-creatures; but that we so find ourselves is an empirical fact, not a metaphysical or logical necessity. As my visual perceptions do not include my own eyes as objects for me, neither do they imply them as objects for others; and if I can conceive this, I can equally conceive myself alone or isolated in the Universe, and without an organism, my existence being a series of presentations in every one of which relation B would be exhibited, while relation A would have disappeared. That is to say, my organism-my means of expression, or of becoming an object (and implying ejects) to others-is a natural condition of my existence as a member of a society; but is not a condition of the fact that I myself, as subject, am sensitive to a sensible world. It may be a necessity, in the sense that things could not have been different from what they are: but the necessity is not explained by being assumed; and the assumption is none the less an assumption for fitting so conveniently into Dr. Ingleby's scheme.

The confusion (as it seems to me) may be largely traced to an ambiguity in the word 'organism.' I do not say that the word cannot be intelligibly applied to 'the mode of receptivity to and reaction upon impressions.' I can imagine myself saying that I am 'organic' to the lamp in the act of perceiving it, since it enters into a system of relations which have been organised in my experience; and I can understand calling a relatively fixed association of conscious states an 'organic

constitution.' But the identity of word must not surely be taken to imply any necessary or logical correspondence or connection between 'organism' in this new sense and the 'means of expression'—the objectivity to others—which was before considered. Regarded as a 'mode of receptivity,' the 'organism' exists solely for the subject of relation B, whom we can conceive to be alone in the Universe—or alone in his universe; and it implies no body, or matter, or phenomenal aspect of any sort, belonging to him. In a word, the phenomenality of the subject is not in the least implied in the admittedly necessary phenomenality of objects to the subject.

Only one way occurs to me of meeting this difficulty—to conceive the Non-Ego as Clifford did, and to regard the 'lamp for me' as a 'means of expression' or obverse of some psychical existence behind what I call the lamp. On this view, which would endow the lamp or its atoms with a certain amount of embryonic (and for me ejective) mind-stuff, Dr. Ingleby might have denied the conceivability of my finding myself alone at any rate in a visible universe (personally, I could make myself happy in an audible one); since the phenomena which entered into my states of consciousness would imply the joint existence with me of a multitude of psychical entities or ejects; and not the mere existence or potentiality of a multitude of objects, having no psychical existence except on the arena of a developed mind. modesty is still such that I cannot think my being there would make any difference to these ejects. I cannot feel that their existence implies in me an objective organismthat because I am sensitive to their objective side, their ejective side is therefore sensitive to me; in short, that the lamp which I look at really finds me phenomenal. Still. perhaps it politely, though unconsciously, strives to do so. But at this rate, the view of the necessary phenomenality of the organism should surely be based directly on the mindstuff hypothesis, which may be defended by certain complex arguments of its own; and not on the simple and necessary correlation of subject and object, which certainly does not logically involve any such hypothesis. I should then be able to add some further arguments to those which I have brought against Clifford's theory. For instance, I should support my objection to labelling 'means of expression' and 'mode of receptivity' with the same term, by pointing out that the receptivity appears to be at its minimum where the expression is at its maximum. The receptivity of what we call Inorganic Nature must be almost nil; the little minds of its atoms have not developed even the beginning of a consciousness, as Clifford expressly admitted. 'Well,' it may be said, 'and may not that be the very reason why inorganic matter is so dense, and gross, and inexpressive-mere dead clay-whereas organic matter shows itself increasingly mobile the higher its development, and in higher states of existence may very likely be increasingly tenuous?' But, in the first place, consider not clay, but free gas, or matter in its radiant form; it has tenuity and mobility enough-if those are to be among the conditions of 'expressiveness.' And in the second place, gross seems a very question-begging word. Though an attractive picture may be drawn of the flexible and adaptable organism that our advance in spirituality may develop, I cannot manage to carry the analogy all through Nature. Are not some of our very loftiest ideas of force and grandeur derived from dense, and heavy, and above all stable (not fluid) things—the Weisshorn, the Pyramids, and the Moon? These things are, in a sense, more expressive to me than even the best philosopher's organism-especially as for present purposes the 'expression' of his profoundest

thought is not his kindling eye or animated gestures, but his molecular brain-movements.

To return, however, to Dr. Ingleby's 'subject.' No doubt his perception of objects in spatial relations implies his perception of himself as locally placed; but locally placed only as a mathematical point. His mode of receptivity—or his 'organisation' if the word commends itself-of visual phenomena in no way implies phenomenalisation of the ideal point or centre of local relativities as an 'organism,' an object among other objects; any more than his organisation of a set of sounds as one tune implies that he hears himself humming another. How could such a local point, which is implied by my perceptions of an external world, be, or do duty for, the organism which is not so implied—the sensible object which puzzles or should puzzle the Idealist by presenting nerve-changes that are at once correlated with and irrelevant to his ideas? A mode of receptivity, or relation to phenomena, is not a phenomenon, however 'organically constituted.' It may perhaps be replied that I posit myself in space, and that as myself is, in reflection, an object to me, I posit it as a spatial object. But however much I try to identify myself with the ideal centre of spatial relations, I do not thereby give to that centre extension; how then could i possibly be an object, a perceptible organism to others? And again, how could a perfectly simple point exhibit a complicated series of correspondences with my receptivity to (or my construction of) my orderly various world of coloured objects, which hold to that point only one relation—the nakedly spatial?

I should allow that if I had no visible and extended organism, if I had not found this in the world of external objects, though my experience of my world might be as keen and various as now, the words 'space' and 'externality' might

not retain at all their present connotation. The presentations of the 'external' world would probably pass before my supposed point more after the fashion of the passages of a symphony; and though the relation of their parts to the point would still be quite definite, and the 'externality' represent a specific form of experience, I doubt whether it would involve anything like the sense of vis-d-vis-ness or parallelism, suggested to me now by such a phrase as 'positing myself in space.' But clearly the surmise that, when my local existence was reduced to a point, my visual experiences might be modified, is no concession to the view that visual experiences in themselves imply a local 'positing' of something wholly different to the point-to wit, an extended body. And how about experiences which are not visual or external at all? Percipience of an external world by no means exhausts percipience; and I put the question: How do I represent myself, or how can I be shown to need to represent myself, as a phenomenon similar to the phenomena which I encounter in another world of experience—the world of music? A tune is a presentation, or a series of presentations, which, for all that concerns the point in debate, is exactly on a par with the lamp. If then it can be demonstrated that, when I contemplate external objects, I must be an object among them, what precludes a similar demonstration that, when I contemplate tunes, I must be a tune among them, except the inherent absurdity of the notion? Perhaps it might be held that, when experiencing music, I am perceptible under different modes of perception from those involved in my bodily perceptibility. But such an idea is in the first place opposed to the fact that nobody ever found me so; and in the second place, would be a mere blind. The logical position could only be-It is implied by the fact that I have perceptions of sight and touch, that I am visible and tangible

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to others: it is similarly implied by the fact that I have perceptions of sound, that I am audible to others. That is the only mode of perception that could have any relevance to the argument. But in general, I would assert that not a step can be made in deducing the phenomenality of the subject from any sort of experience in which the two qualities of extension and externality are not prominent. A quite parallel case to music would be that of mere colour-percepts. How would a percipient who had seen nothing but blue sky 'clothe his self-consciousness homogeneously?' I expect that it would need the propounding of the problem to make him look properly blue.

END OF THE FIRST VOLUME.

PRINTED BY
SPOTTSWOODS AND CO., NEW-STREET SQUARE
ROSEOGE